

# Appendix G: Transportation Supporting Documentation

## **Traffic Counts**

- Automatic Traffic Record Raw Data
- Turning Movement Count Raw Data

## **Vehicular Crash Data**

- Grouped Crash Data from MassDOT Website
- Crash Rate Sheets

## **Trip Generation**

- Program A Trip Generation Table
- Program B Trip Generation Table
- Phase 1 Project Trip Generation Table

## **Intersection Capacity Analysis**

- Existing Condition Results
- No-Build Conditions Results
- Phase 1 Project Condition Results
- Phase 1 Project Condition with Mitigation Results

# Traffic Counts

- Automatic Traffic Record Raw Data
- Turning Movment Count Raw Data



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175607 A Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	319	12	8	0	0	0	0	0	0	0	0	0	0	339
01:00	174	8	8	0	0	0	0	0	0	0	0	0	0	190
02:00	167	16	14	0	0	0	0	0	0	0	0	0	0	197
03:00	264	29	25	0	0	0	0	0	0	0	0	0	0	318
04:00	614	42	23	0	0	0	0	0	0	0	0	0	0	679
05:00	1484	71	51	0	0	0	0	0	0	0	0	0	0	1606
06:00	1976	103	25	0	0	0	0	0	0	0	0	0	0	2104
07:00	2037	79	18	0	0	0	0	0	0	0	0	0	0	2134
08:00	1900	88	30	0	0	0	0	0	0	0	0	0	0	2018
09:00	1836	95	23	0	0	0	0	0	0	0	0	0	0	1954
10:00	1737	96	25	0	0	0	0	0	0	0	0	0	0	1858
11:00	1593	88	30	0	0	1593	0	0	0	0	0	0	0	1711
12 PM	1497	92	28	0	0	0	0	0	0	0	0	0	0	1617
13:00	1649	69	28	0	0	0	0	0	0	0	0	0	0	1746
14:00	1714	85	27	0	0	0	0	0	0	0	0	0	0	1826
15:00	1667	84	22	0	0	0	0	0	0	0	0	0	0	1773
16:00	1583	62	19	0	0	0	0	0	0	0	0	0	0	1664
17:00	1539	52	9	0	0	1539	0	0	0	0	0	0	0	1600
18:00	1366	37	14	0	0	0	0	0	0	0	0	0	0	1417
19:00	1221	31	13	0	0	1221	0	0	0	0	0	0	0	1265
20:00	1133	25	13	0	0	0	0	0	0	0	0	0	0	1171
21:00	914	34	14	0	0	0	0	0	0	0	0	0	0	962
22:00	794	17	12	0	0	0	0	0	0	0	0	0	0	823
23:00	498	9	7	0	0	0	0	0	0	0	0	0	0	514
Total	29676	1324	486	0	0	0	0	0	0	0	0	0	0	31486
Percent	94.3%	4.2%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	06:00	05:00											07:00
Vol.	2037	103	51											2134
PM Peak	14:00	12:00	12:00											14:00
Vol.	1714	92	28											1826



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175607 A Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy												Total
05/04/1															
7	315	9	9	0	0	0	0	0	0	0	0	0	0	333	
01:00	180	8	7	0	0	0	0	0	0	0	0	0	0	195	
02:00	175	17	10	0	0	0	0	0	0	0	0	0	0	202	
03:00	291	28	18	0	0	0	0	0	0	0	0	0	0	337	
04:00	658	46	24	0	0	0	0	0	0	0	0	0	0	728	
05:00	1482	71	39	0	0	0	0	0	0	0	0	0	0	1592	
06:00	1952	87	20	0	0	0	0	0	0	0	0	0	0	2059	
07:00	2002	84	22	0	0	0	0	0	0	0	0	0	0	2108	
08:00	1974	69	22	0	0	0	0	0	0	0	0	0	0	2065	
09:00	1842	104	25	0	0	0	0	0	0	0	0	0	0	1971	
10:00	1711	80	29	0	0	0	0	0	0	0	0	0	0	1820	
11:00	1510	70	24	0	0	0	0	0	0	0	0	0	0	1604	
12 PM	1564	66	28	0	0	0	0	0	0	0	0	0	0	1658	
13:00	1630	90	24	0	0	0	0	0	0	0	0	0	0	1744	
14:00	1737	85	25	0	0	0	0	0	0	0	0	0	0	1847	
15:00	1779	66	14	0	0	0	0	0	0	0	0	0	0	1859	
16:00	1641	62	11	0	0	0	0	0	0	0	0	0	0	1714	
17:00	1608	43	11	0	0	0	0	0	0	0	0	0	0	1662	
18:00	1438	51	9	0	0	0	0	0	0	0	0	0	0	1498	
19:00	1273	28	16	0	0	0	0	0	0	0	0	0	0	1317	
20:00	1120	34	17	0	0	0	0	0	0	0	0	0	0	1171	
21:00	985	21	12	0	0	0	0	0	0	0	0	0	0	1018	
22:00	758	30	27	0	0	0	0	0	0	0	0	0	0	815	
23:00	528	14	10	0	0	0	0	0	0	0	0	0	0	552	
Total	30153	1263	453	0	0	0	0	0	0	0	0	0	0	31869	
Percent	94.6%	4.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak	07:00	09:00	05:00											07:00	
Vol.	2002	104	39											2108	
PM Peak	15:00	13:00	12:00											15:00	
Vol.	1779	90	28											1859	



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175607 A Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	322	10	5	0	0	0	0	0	0	0	0	0	0	337
01:00	344	16	5	0	0	0	0	0	0	0	0	0	0	365
02:00	201	8	2	0	0	0	0	0	0	0	0	0	0	211
03:00	311	16	16	0	0	0	0	0	0	0	0	0	0	343
04:00	659	37	22	0	0	0	0	0	0	0	0	0	0	718
05:00	1411	61	25	0	0	0	0	0	0	0	0	0	0	1497
06:00	1937	108	31	0	0	0	0	0	0	0	0	0	0	2076
07:00	1901	86	22	0	0	0	0	0	0	0	0	0	0	2009
08:00	1860	92	23	0	0	0	0	0	0	0	0	0	0	1975
09:00	1573	78	29	0	0	0	0	0	0	0	0	0	0	1680
10:00	1545	73	29	0	0	0	0	0	0	0	0	0	0	1647
11:00	1547	82	36	0	0	1547	0	0	0	0	0	0	0	1665
12 PM	1678	72	36	0	0	0	0	0	0	0	0	0	0	1786
13:00	1756	105	28	0	0	0	0	0	0	0	0	0	0	1889
14:00	1794	81	17	0	0	0	0	0	0	0	0	0	0	1892
15:00	1649	76	27	0	0	1649	0	0	0	0	0	0	0	1752
16:00	1601	64	13	0	0	0	0	0	0	0	0	0	0	1678
17:00	1679	37	12	0	0	0	0	0	0	0	0	0	0	1728
18:00	1620	57	11	0	0	0	0	0	0	0	0	0	0	1688
19:00	1470	36	12	0	0	1470	0	0	0	0	0	0	0	1518
20:00	1081	29	18	0	0	0	0	0	0	0	0	0	0	1128
21:00	1007	28	11	0	0	0	0	0	0	0	0	0	0	1046
22:00	920	20	12	0	0	0	0	0	0	0	0	0	0	952
23:00	641	13	10	0	0	0	0	0	0	0	0	0	0	664
Total	30507	1285	452	0	0	0	0	0	0	0	0	0	0	32244
Percent	94.6%	4.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	06:00	11:00											06:00
Vol.	1937	108	36											2076
PM Peak	14:00	13:00	12:00											14:00
Vol.	1794	105	36											1892



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175607 A Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	484	9	3	0	0	0	0	0	0	0	0	0	0	496
01:00	354	9	4	0	0	0	0	0	0	0	0	0	0	367
02:00	303	11	5	0	0	0	0	0	0	0	0	0	0	319
03:00	317	15	13	0	0	0	0	0	0	0	0	0	0	345
04:00	472	31	17	0	0	0	0	0	0	0	0	0	0	520
05:00	717	31	11	0	0	0	0	0	0	0	0	0	0	759
06:00	1039	26	9	0	0	0	0	0	0	0	0	0	0	1074
07:00	1042	45	9	0	0	0	0	0	0	0	0	0	0	1096
08:00	1174	58	10	0	0	0	0	0	0	0	0	0	0	1242
09:00	1361	39	16	0	0	0	0	0	0	0	0	0	0	1416
10:00	1558	41	6	0	0	0	0	0	0	0	0	0	0	1605
11:00	1613	36	10	0	0	0	0	0	0	0	0	0	0	1659
12 PM	1648	31	7	0	0	0	0	0	0	0	0	0	0	1686
13:00	1807	34	8	0	0	0	0	0	0	0	0	0	0	1849
14:00	1876	35	11	0	0	0	0	0	0	0	0	0	0	1922
15:00	1919	43	6	0	0	0	0	0	0	0	0	0	0	1968
16:00	1802	25	5	0	0	0	0	0	0	0	0	0	0	1832
17:00	1736	21	5	0	0	0	0	0	0	0	0	0	0	1762
18:00	1752	25	6	0	0	0	0	0	0	0	0	0	0	1783
19:00	1707	17	5	0	0	0	0	0	0	0	0	0	0	1729
20:00	1240	20	6	0	0	0	0	0	0	0	0	0	0	1266
21:00	1206	19	6	0	0	0	0	0	0	0	0	0	0	1231
22:00	988	18	4	0	0	0	0	0	0	0	0	0	0	1010
23:00	746	17	3	0	0	0	0	0	0	0	0	0	0	766
Total	28861	656	185	0	0	0	0	0	0	0	0	0	0	29702
Percent	97.2%	2.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	04:00											11:00
Vol.	1613	58	17											1659
PM Peak	15:00	15:00	14:00											15:00
Vol.	1919	43	11											1968



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175607 A Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/17														
7:00	576	3	1	0	0	0	0	0	0	0	0	0	0	580
01:00	492	7	10	0	0	0	0	0	0	0	0	0	0	509
02:00	335	5	2	0	0	0	0	0	0	0	0	0	0	342
03:00	285	11	4	0	0	0	0	0	0	0	0	0	0	300
04:00	449	19	3	0	0	0	0	0	0	0	0	0	0	471
05:00	593	20	9	0	0	0	0	0	0	0	0	0	0	622
06:00	799	27	7	0	0	0	0	0	0	0	0	0	0	833
07:00	889	12	6	0	0	0	0	0	0	0	0	0	0	907
08:00	1028	17	8	0	0	0	0	0	0	0	0	0	0	1053
09:00	1332	21	4	0	0	0	0	0	0	0	0	0	0	1357
10:00	1451	28	6	0	0	0	0	0	0	0	0	0	0	1485
11:00	1518	28	6	0	0	0	0	0	0	0	0	0	0	1552
12 PM	1732	21	1	0	0	0	0	0	0	0	0	0	0	1754
13:00	1791	23	4	0	0	0	0	0	0	0	0	0	0	1818
14:00	1758	22	4	0	0	0	0	0	0	0	0	0	0	1784
15:00	1631	25	8	0	0	0	0	0	0	0	0	0	0	1664
16:00	1833	19	6	0	0	0	0	0	0	0	0	0	0	1858
17:00	1562	16	4	0	0	0	0	0	0	0	0	0	0	1582
18:00	1551	25	6	0	0	0	0	0	0	0	0	0	0	1582
19:00	1329	15	7	0	0	0	0	0	0	0	0	0	0	1351
20:00	1333	19	8	0	0	0	0	0	0	0	0	0	0	1360
21:00	1033	21	5	0	0	0	0	0	0	0	0	0	0	1059
22:00	778	11	8	0	0	0	0	0	0	0	0	0	0	797
23:00	476	21	9	0	0	0	0	0	0	0	0	0	0	506
Total	26554	436	136	0	0	0	0	0	0	0	0	0	0	27126
Percent	97.9%	1.6%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	01:00											11:00
Vol.	1518	28	10											1552
PM Peak	16:00	15:00	23:00											16:00
Vol.	1833	25	9											1858



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	350	14	6	0	0	0	0	0	0	0	0	0	0	370
01:00	298	11	3	0	0	0	0	0	0	0	0	0	0	312
02:00	155	7	4	0	0	0	0	0	0	0	0	0	0	166
03:00	268	19	10	0	0	0	0	0	0	0	0	0	0	297
04:00	686	37	16	0	0	0	0	0	0	0	0	0	0	739
05:00	1521	55	34	0	0	0	0	0	0	0	0	0	0	1610
06:00	1997	112	18	0	0	0	0	0	0	0	0	0	0	2127
07:00	2017	68	10	0	0	0	0	0	0	0	0	0	0	2095
08:00	1943	73	10	0	0	0	0	0	0	0	0	0	0	2026
09:00	1721	89	23	0	0	0	0	0	0	0	0	0	0	1833
10:00	1504	84	29	0	0	0	0	0	0	0	0	0	0	1617
11:00	1476	91	27	0	0	0	0	0	0	0	0	0	0	1594
12 PM	1506	87	34	0	0	0	0	0	0	0	0	0	0	1627
13:00	1540	89	20	0	0	0	0	0	0	0	0	0	0	1649
14:00	1608	70	18	0	0	0	0	0	0	0	0	0	0	1696
15:00	1663	64	20	0	0	0	0	0	0	0	0	0	0	1747
16:00	1455	64	12	0	0	0	0	0	0	0	0	0	0	1531
17:00	1336	49	7	0	0	0	0	0	0	0	0	0	0	1392
18:00	1224	32	15	0	0	0	0	0	0	0	0	0	0	1271
19:00	1141	23	9	0	0	0	0	0	0	0	0	0	0	1173
20:00	1014	29	19	0	0	0	0	0	0	0	0	0	0	1062
21:00	850	15	18	0	0	0	0	0	0	0	0	0	0	883
22:00	700	20	6	0	0	0	0	0	0	0	0	0	0	726
23:00	437	8	5	0	0	0	0	0	0	0	0	0	0	450
Total	28410	1210	373	0	0	0	0	0	0	0	0	0	0	29993
Percent	94.7%	4.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	06:00	05:00											06:00
Vol.	2017	112	34											2127
PM Peak	15:00	13:00	12:00											15:00
Vol.	1663	89	34											1747





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175607 A Class  
Site Code: 13796.00

[illegible]



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175607 A Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	626	14	7	0	0	0	0	0	0	0	0	0	0	647
01:00	309	9	11	0	0	0	0	0	0	0	0	0	0	329
02:00	210	11	7	0	0	0	0	0	0	0	0	0	0	228
03:00	204	15	5	0	0	0	0	0	0	0	0	0	0	224
04:00	319	28	24	0	0	0	0	0	0	0	0	0	0	371
05:00	600	34	13	0	0	0	0	0	0	0	0	0	0	647
06:00	834	59	8	0	0	0	0	0	0	0	0	0	0	901
07:00	1068	66	12	0	0	0	0	0	0	0	0	0	0	1146
08:00	1060	89	22	0	0	0	0	0	0	0	0	0	0	1171
09:00	1161	94	18	0	0	0	0	0	0	0	0	0	0	1273
10:00	1271	99	33	0	0	0	0	0	0	0	0	0	0	1403
11:00	1423	111	27	0	0	0	0	0	0	0	0	0	0	1561
12 PM	1513	81	26	0	0	0	0	0	0	0	0	0	0	1620
13:00	1454	82	14	0	0	0	0	0	0	0	0	0	0	1550
14:00	1752	72	25	0	0	0	0	0	0	0	0	0	0	1849
15:00	1803	86	16	0	0	0	0	0	0	0	0	0	0	1905
16:00	1891	71	12	0	0	0	0	0	0	0	0	0	0	1974
17:00	1914	65	19	0	0	0	0	0	0	0	0	0	0	1998
18:00	1998	65	20	0	0	0	0	0	0	0	0	0	0	2083
19:00	1834	41	7	0	0	0	0	0	0	0	0	0	0	1882
20:00	1460	33	7	0	0	0	0	0	0	0	0	0	0	1500
21:00	1306	43	14	0	0	0	0	0	0	0	0	0	0	1363
22:00	1091	26	13	0	0	0	0	0	0	0	0	0	0	1130
23:00	1018	16	7	0	0	0	0	0	0	0	0	0	0	1041
Total	28119	1310	367	0	0	0	0	0	0	0	0	0	0	29796
Percent	94.4%	4.4%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	10:00											11:00
Vol.	1423	111	33											1561
PM Peak	18:00	15:00	12:00											18:00
Vol.	1998	86	26											2083



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175607 A Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/17														
7:00	583	11	8	0	0	0	0	0	0	0	0	0	0	602
01:00	321	13	13	0	0	0	0	0	0	0	0	0	0	347
02:00	268	7	6	0	0	0	0	0	0	0	0	0	0	281
03:00	207	16	8	0	0	0	0	0	0	0	0	0	0	231
04:00	371	20	6	0	0	0	0	0	0	0	0	0	0	397
05:00	635	35	20	0	0	0	0	0	0	0	0	0	0	690
06:00	924	62	13	0	0	0	0	0	0	0	0	0	0	999
07:00	1182	66	22	0	0	0	0	0	0	0	0	0	0	1270
08:00	1063	85	20	0	0	0	0	0	0	0	0	0	0	1168
09:00	1154	100	23	0	0	0	0	0	0	0	0	0	0	1277
10:00	1300	86	28	0	0	0	0	0	0	0	0	0	0	1414
11:00	1470	121	27	0	0	0	0	0	0	0	0	0	0	1618
12 PM	1557	78	18	0	0	0	0	0	0	0	0	0	0	1653
13:00	1580	90	30	0	0	0	0	0	0	0	0	0	0	1700
14:00	1881	80	16	0	0	0	0	0	0	0	0	0	0	1977
15:00	1940	70	18	0	0	0	0	0	0	0	0	0	0	2028
16:00	2006	76	23	0	0	0	0	0	0	0	0	0	0	2105
17:00	2108	62	11	0	0	0	0	0	0	0	0	0	0	2181
18:00	2016	64	12	0	0	0	0	0	0	0	0	0	0	2092
19:00	1775	55	17	0	0	0	0	0	0	0	0	0	0	1847
20:00	1559	38	8	0	0	0	0	0	0	0	0	0	0	1605
21:00	1352	35	16	0	0	0	0	0	0	0	0	0	0	1403
22:00	1248	26	13	0	0	0	0	0	0	0	0	0	0	1287
23:00	1185	21	7	0	0	0	0	0	0	0	0	0	0	1213
Total	29685	1317	383	0	0	0	0	0	0	0	0	0	0	31385
Percent	94.6%	4.2%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	10:00											11:00
Vol.	1470	121	28											1618
PM Peak	17:00	13:00	13:00											17:00
Vol.	2108	90	30											2181



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175607 A Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	697	17	9	0	0	0	0	0	0	0	0	0	0	723
01:00	404	19	5	0	0	0	0	0	0	0	0	0	0	428
02:00	265	10	7	0	0	0	0	0	0	0	0	0	0	282
03:00	215	13	18	0	0	0	0	0	0	0	0	0	0	246
04:00	382	33	9	0	0	0	0	0	0	0	0	0	0	424
05:00	640	40	17	0	0	0	0	0	0	0	0	0	0	697
06:00	807	44	14	0	0	0	0	0	0	0	0	0	0	865
07:00	1189	70	20	0	0	0	0	0	0	0	0	0	0	1279
08:00	1103	97	20	0	0	0	0	0	0	0	0	0	0	1220
09:00	1171	100	26	0	0	0	0	0	0	0	0	0	0	1297
10:00	1268	99	25	0	0	0	0	0	0	0	0	0	0	1392
11:00	1459	90	35	0	0	0	0	0	0	0	0	0	0	1584
12 PM	1619	104	21	0	0	0	0	0	0	0	0	0	0	1744
13:00	1565	77	17	0	0	0	0	0	0	0	0	0	0	1659
14:00	1800	78	19	0	0	0	0	0	0	0	0	0	0	1897
15:00	1879	58	15	0	0	0	0	0	0	0	0	0	0	1952
16:00	1895	43	9	0	0	0	0	0	0	0	0	0	0	1947
17:00	1821	67	13	0	0	0	0	0	0	0	0	0	0	1901
18:00	1889	55	11	0	0	0	0	0	0	0	0	0	0	1955
19:00	1664	45	16	0	0	0	0	0	0	0	0	0	0	1725
20:00	1442	25	7	0	0	0	0	0	0	0	0	0	0	1474
21:00	1254	37	21	0	0	0	0	0	0	0	0	0	0	1312
22:00	1391	22	15	0	0	0	0	0	0	0	0	0	0	1428
23:00	1249	17	8	0	0	0	0	0	0	0	0	0	0	1274
Total	29068	1260	377	0	0	0	0	0	0	0	0	0	0	30705
Percent	94.7%	4.1%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	11:00											11:00
Vol.	1459	100	35											1584
PM Peak	16:00	12:00	12:00											18:00
Vol.	1895	104	21											1955



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	878	17	6	0	0	0	0	0	0	0	0	0	0	901
01:00	653	12	2	0	0	0	0	0	0	0	0	0	0	667
02:00	509	12	4	0	0	0	0	0	0	0	0	0	0	525
03:00	354	7	7	0	0	0	0	0	0	0	0	0	0	368
04:00	409	16	10	0	0	0	0	0	0	0	0	0	0	435
05:00	532	27	4	0	0	0	0	0	0	0	0	0	0	563
06:00	715	28	4	0	0	0	0	0	0	0	0	0	0	747
07:00	992	34	7	0	0	0	0	0	0	0	0	0	0	1033
08:00	1050	46	9	0	0	0	0	0	0	0	0	0	0	1105
09:00	1304	46	14	0	0	0	0	0	0	0	0	0	0	1364
10:00	1483	39	11	0	0	0	0	0	0	0	0	0	0	1533
11:00	1807	47	11	0	0	0	0	0	0	0	0	0	0	1865
12 PM	1903	37	6	0	0	0	0	0	0	0	0	0	0	1946
13:00	1997	32	10	0	0	0	0	0	0	0	0	0	0	2039
14:00	2099	33	6	0	0	0	0	0	0	0	0	0	0	2138
15:00	2045	36	5	0	0	0	0	0	0	0	0	0	0	2086
16:00	1995	33	4	0	0	0	0	0	0	0	0	0	0	2032
17:00	1881	37	6	0	0	0	0	0	0	0	0	0	0	1924
18:00	1724	28	4	0	0	0	0	0	0	0	0	0	0	1756
19:00	1522	26	4	0	0	0	0	0	0	0	0	0	0	1552
20:00	1414	18	4	0	0	0	0	0	0	0	0	0	0	1436
21:00	1473	24	3	0	0	0	0	0	0	0	0	0	0	1500
22:00	1337	23	4	0	0	0	0	0	0	0	0	0	0	1364
23:00	1162	18	3	0	0	0	0	0	0	0	0	0	0	1183
Total	31238	676	148	0	0	0	0	0	0	0	0	0	0	32062
Percent	97.4%	2.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	09:00											11:00
Vol.	1807	47	14											1865
PM Peak	14:00	12:00	13:00											14:00
Vol.	2099	37	10											2138



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175607 A Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/1														
7	804	20	1	0	0	0	0	0	0	0	0	0	0	825
01:00	683	18	3	0	0	0	0	0	0	0	0	0	0	704
02:00	473	12	1	0	0	0	0	0	0	0	0	0	0	486
03:00	382	8	4	0	0	0	0	0	0	0	0	0	0	394
04:00	393	14	6	0	0	0	0	0	0	0	0	0	0	413
05:00	504	23	1	0	0	0	0	0	0	0	0	0	0	528
06:00	561	20	3	0	0	0	0	0	0	0	0	0	0	584
07:00	738	21	5	0	0	0	0	0	0	0	0	0	0	764
08:00	855	22	11	0	0	0	0	0	0	0	0	0	0	888
09:00	1152	19	3	0	0	0	0	0	0	0	0	0	0	1174
10:00	1345	26	3	0	0	0	0	0	0	0	0	0	0	1374
11:00	1511	29	3	0	0	0	0	0	0	0	0	0	0	1543
12 PM	1826	25	4	0	0	0	0	0	0	0	0	0	0	1855
13:00	1919	19	7	0	0	0	0	0	0	0	0	0	0	1945
14:00	1996	27	1	0	0	0	0	0	0	0	0	0	0	2024
15:00	1852	36	2	0	0	0	0	0	0	0	0	0	0	1890
16:00	1728	20	4	0	0	0	0	0	0	0	0	0	0	1752
17:00	1769	23	5	0	0	0	0	0	0	0	0	0	0	1797
18:00	1687	25	4	0	0	0	0	0	0	0	0	0	0	1716
19:00	1577	12	4	0	0	0	0	0	0	0	0	0	0	1593
20:00	1425	24	8	0	0	0	0	0	0	0	0	0	0	1457
21:00	1207	18	5	0	0	0	0	0	0	0	0	0	0	1230
22:00	1055	21	4	0	0	0	0	0	0	0	0	0	0	1080
23:00	829	19	8	0	0	0	0	0	0	0	0	0	0	856
Total	28271	501	100	0	0	0	0	0	0	0	0	0	0	28872
Percent	97.9%	1.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	08:00											11:00
Vol.	1511	29	11											1543
PM Peak	14:00	15:00	20:00											14:00
Vol.	1996	36	8											2024



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175607 A Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	503	12	3	0	0	0	0	0	0	0	0	0	0	518
01:00	320	9	5	0	0	0	0	0	0	0	0	0	0	334
02:00	214	5	3	0	0	0	0	0	0	0	0	0	0	222
03:00	179	10	4	0	0	0	0	0	0	0	0	0	0	193
04:00	327	17	7	0	0	0	0	0	0	0	0	0	0	351
05:00	625	44	7	0	0	0	0	0	0	0	0	0	0	676
06:00	886	46	15	0	0	0	0	0	0	0	0	0	0	947
07:00	1167	62	14	0	0	0	0	0	0	0	0	0	0	1243
08:00	1046	76	16	0	0	0	0	0	0	0	0	0	0	1138
09:00	1095	75	11	0	0	0	0	0	0	0	0	0	0	1181
10:00	1175	124	29	0	0	0	0	0	0	0	0	0	0	1328
11:00	1287	116	11	0	0	0	0	0	0	0	0	0	0	1414
12 PM	1387	72	20	0	0	0	0	0	0	0	0	0	0	1479
13:00	1502	90	13	0	0	0	0	0	0	0	0	0	0	1605
14:00	1682	64	23	0	0	0	0	0	0	0	0	0	0	1769
15:00	1985	71	15	0	0	0	0	0	0	0	0	0	0	2071
16:00	1938	88	17	0	0	0	0	0	0	0	0	0	0	2043
17:00	2074	50	15	0	0	0	0	0	0	0	0	0	0	2139
18:00	1949	55	12	0	0	0	0	0	0	0	0	0	0	2016
19:00	1472	45	5	0	0	0	0	0	0	0	0	0	0	1522
20:00	1342	22	2	0	0	0	0	0	0	0	0	0	0	1366
21:00	1168	36	13	0	0	0	0	0	0	0	0	0	0	1217
22:00	976	25	11	0	0	0	0	0	0	0	0	0	0	1012
23:00	835	17	7	0	0	0	0	0	0	0	0	0	0	859
Total	27134	1231	278	0	0	0	0	0	0	0	0	0	0	28643
Percent	94.7%	4.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	10:00											11:00
Vol.	1287	124	29											1414
PM Peak	17:00	13:00	14:00											17:00
Vol.	2074	90	23											2139



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175607 A Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/17	456	10	3	0	0	0	0	0	0	0	0	0	0	469
01:00	312	10	4	0	0	0	0	0	0	0	0	0	0	326
02:00	209	9	5	0	0	0	0	0	0	0	0	0	0	223
03:00	172	13	12	0	0	0	0	0	0	0	0	0	0	197
04:00	284	33	15	0	0	0	0	0	0	0	0	0	0	332
05:00	592	53	10	0	0	0	0	0	0	0	0	0	0	655
06:00	913	55	13	0	0	0	0	0	0	0	0	0	0	981
07:00	1099	78	18	0	0	0	0	0	0	0	0	0	0	1195
08:00	1084	71	27	0	0	0	0	0	0	0	0	0	0	1182
09:00	1113	90	26	0	0	0	0	0	0	0	0	0	0	1229
10:00	1218	109	27	0	0	0	0	0	0	0	0	0	0	1354
11:00	1293	87	26	0	0	0	0	0	0	0	0	0	0	1406
12 PM	1317	86	12	0	0	0	0	0	0	0	0	0	0	1415
13:00	1412	83	24	0	0	0	0	0	0	0	0	0	0	1519
14:00	1754	68	21	0	0	0	0	0	0	0	0	0	0	1843
15:00	2011	84	12	0	0	0	0	0	0	0	0	0	0	2107
16:00	2016	92	12	0	0	0	0	0	0	0	0	0	0	2120
17:00	2124	68	8	0	0	0	0	0	0	0	0	0	0	2200
18:00	2042	66	9	0	0	0	0	0	0	0	0	0	0	2117
19:00	1692	41	8	0	0	0	0	0	0	0	0	0	0	1741
20:00	1352	29	9	0	0	0	0	0	0	0	0	0	0	1390
21:00	1300	39	13	0	0	0	0	0	0	0	0	0	0	1352
22:00	1151	21	8	0	0	0	0	0	0	0	0	0	0	1180
23:00	880	24	7	0	0	0	0	0	0	0	0	0	0	911
Total	27796	1319	329	0	0	0	0	0	0	0	0	0	0	29444
Percent	94.4%	4.5%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	08:00											11:00
Vol.	1293	109	27											1406
PM Peak	17:00	16:00	13:00											17:00
Vol.	2124	92	24											2200





PRECISION  
D A T A  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Route 1A  
north of Waldemar Avenue  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 A Volume  
Site Code: 13796.00

Start Time	5/3/2017		5/4/2017		5/5/2017		5/6/2017		5/7/2017		5/8/2017		5/9/2017		Week Average	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	339	647	333	602	337	723	496	901	580	825	370	518	295	469	393	669
01:00	190	329	195	347	365	428	367	667	509	704	312	334	195	326	305	448
02:00	197	228	202	281	211	282	319	525	342	486	166	222	164	223	229	321
03:00	318	224	337	231	343	246	345	368	300	394	297	193	307	197	321	265
04:00	679	371	728	397	718	424	520	435	471	413	739	351	731	332	655	389
05:00	1606	647	1592	690	1497	697	759	563	622	528	1610	676	1563	655	1321	637
06:00	2104	901	2059	999	2076	865	1074	747	833	584	2127	947	2405	981	1811	861
07:00	2134	1146	2108	1270	2009	1279	1096	1033	907	764	2095	1243	2136	1195	1784	1133
08:00	2018	1171	2065	1168	1975	1220	1242	1105	1053	888	2026	1138	2059	1182	1777	1125
09:00	1954	1273	1971	1277	1680	1297	1416	1364	1357	1174	1833	1181	1870	1229	1726	1256
10:00	1858	1403	1820	1414	1647	1392	1605	1533	1485	1374	1617	1328	1686	1354	1674	1400
11:00	1711	1561	1604	1618	1665	1584	1659	1865	1552	1543	1594	1414	1623	1406	1630	1570
12:00 PM	1617	1620	1658	1653	1786	1744	1686	1946	1754	1855	1627	1479	1583	1415	1673	1673
01:00	1746	1550	1744	1700	1889	1659	1849	2039	1818	1945	1649	1605	1606	1519	1757	1717
02:00	1826	1849	1847	1977	1892	1897	1922	2138	1784	2024	1696	1769	1763	1843	1819	1928
03:00	1773	1905	1859	2028	1752	1952	1968	2086	1664	1890	1747	2071	1764	2107	1790	2006
04:00	1664	1974	1714	2105	1678	1947	1832	2032	1858	1752	1531	2043	1662	2120	1706	1996
05:00	1600	1998	1662	2181	1728	1901	1762	1924	1582	1797	1392	2139	1584	2200	1616	2020
06:00	1417	2083	1498	2092	1688	1955	1783	1756	1582	1716	1271	2016	1356	2117	1514	1962
07:00	1265	1882	1317	1847	1518	1725	1729	1552	1351	1593	1173	1522	1229	1741	1369	1695
08:00	1171	1500	1171	1605	1128	1474	1266	1436	1360	1457	1062	1366	968	1390	1161	1461
09:00	962	1363	1018	1403	1046	1312	1231	1500	1059	1230	883	1217	930	1352	1018	1340
10:00	823	1130	815	1287	952	1428	1010	1364	797	1080	726	1012	786	1180	844	1212
11:00	514	1041	552	1213	664	1274	766	1183	506	856	450	859	483	911	562	1048
Total Day	31486	29796	31869	31385	32244	30705	29702	32062	27126	28872	29993	28643	30748	29444	30455	30132
AM Peak	07:00	11:00	07:00	11:00	06:00	11:00	11:00	11:00	11:00	11:00	06:00	11:00	06:00	11:00	06:00	11:00
Vol.	2134	1561	2108	1618	2076	1584	1659	1865	1552	1543	2127	1414	2405	1406	1811	1570
PM Peak	14:00	18:00	15:00	17:00	14:00	18:00	15:00	14:00	16:00	14:00	15:00	17:00	15:00	17:00	14:00	17:00
Vol.	1826	2083	1859	2181	1892	1955	1968	2138	1858	2024	1747	2139	1764	2200	1819	2020

Comb. Total	61282	63254	62949	61764	55998	58636	60192	60587
ADT	ADT 60,582	AADT 60,582						



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Route 1A  
north of Waldemar Avenue  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 A Volume  
Site Code: 13796.00

Start	SB				NB				Combin ed		5/3/2017			
Time	A.M.	P.M.		A.M.	P.M.		A.M.	P.M.		Wed				
12:00	97	372		195	410		292	782						
12:15	89	404		178	401		267	805						
12:30	90	419		135	390		225	809						
12:45	63	339	422	139	647	419	1620	202	986	841	3237			
01:00	62	438		105	391		167	829						
01:15	42	416		90	400		132	816						
01:30	44	464		67	385		111	849						
01:45	42	190	428	67	329	374	1550	109	519	802	3296			
02:00	46	430		56	429		102	859						
02:15	46	478		61	485		107	963						
02:30	48	454		58	494		106	948						
02:45	57	197	464	53	228	441	1849	110	425	905	3675			
03:00	60	457		51	494		111	951						
03:15	60	441		44	463		104	904						
03:30	93	432		60	463		153	895						
03:45	105	318	443	69	224	485	1905	174	542	928	3678			
04:00	109	438		71	478		180	916						
04:15	156	411		89	516		245	927						
04:30	193	398		90	489		283	887						
04:45	221	679	417	121	371	491	1974	342	1050	908	3638			
05:00	288	415		124	465		412	880						
05:15	353	403		150	504		503	907						
05:30	456	402		174	542		630	944						
05:45	509	1606	380	199	647	487	1998	708	2253	867	3598			
06:00	494	380		208	525		702	905						
06:15	555	377		204	471		759	848						
06:30	559	360		202	544		761	904						
06:45	496	2104	300	287	901	543	2083	783	3005	843	3500			
07:00	549	342		250	468		799	810						
07:15	564	286		321	526		885	812						
07:30	508	318		314	471		822	789						
07:45	513	2134	319	261	1146	417	1882	774	3280	736	3147			
08:00	486	298		290	367		776	665						
08:15	525	296		299	366		824	662						
08:30	491	301		265	409		756	710						
08:45	516	2018	276	317	1171	358	1500	833	3189	634	2671			
09:00	492	270		275	325		767	595						
09:15	502	259		328	368		830	627						
09:30	476	214		334	330		810	544						
09:45	484	1954	219	336	1273	340	1363	820	3227	559	2325			
10:00	452	204		338	297		790	501						
10:15	458	206		329	279		787	485						
10:30	508	197		375	280		883	477						
10:45	440	1858	216	361	1403	274	1130	801	3261	490	1953			
11:00	450	149		414	308		864	457						
11:15	410	135		379	282		789	417						
11:30	424	122		370	266		794	388						
11:45	427	1711	108	398	1561	185	1041	825	3272	293	1555			
Total	15108	16378		9901	19895		25009	36273						
Percent	60.4%	45.2%		39.6%	54.8%									
Day Total	31486		29796		61282									
Peak	06:30	-	02:15	-	11:00	-	06:00	-	10:30	-	02:15	-	-	-
Vol.	2168	-	1853	-	1561	-	2083	-	3337	-	3767	-	-	-
P.H.F.	0.961	0.969		0.943		0.957		0.945		0.978				



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Route 1A  
north of Waldemar Avenue  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 A Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/4/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Thu	
12:00	87	425	188	434	275	859		
12:15	86	442	152	425	238	867		
12:30	71	405	126	410	197	815		
12:45	89	333 386	1658 136	602 384	1653 225	935 770	3311	
01:00	57	460	114	418	171	878		
01:15	54	420	98	437	152	857		
01:30	44	395	81	385	125	780		
01:45	40	195 469	1744 54	347 460	1700 94	542 929	3444	
02:00	45	475	63	489	108	964		
02:15	47	410	84	505	131	915		
02:30	49	496	66	494	115	990		
02:45	61	202 466	1847 68	281 489	1977 129	483 955	3824	
03:00	46	496	45	507	91	1003		
03:15	63	441	58	501	121	942		
03:30	100	474	55	504	155	978		
03:45	128	337 448	1859 73	231 516	2028 201	568 964	3887	
04:00	130	422	95	488	225	910		
04:15	180	418	87	549	267	967		
04:30	190	431	106	541	296	972		
04:45	228	728 443	1714 109	397 527	2105 337	1125 970	3819	
05:00	282	425	158	553	440	978		
05:15	374	409	162	544	536	953		
05:30	459	427	164	546	623	973		
05:45	477	1592 401	1662 206	690 538	2181 683	2282 939	3843	
06:00	499	405	230	495	729	900		
06:15	534	374	235	519	769	893		
06:30	519	368	249	543	768	911		
06:45	507	2059 351	1498 285	999 535	2092 792	3058 886	3590	
07:00	541	293	322	493	863	786		
07:15	539	364	311	482	850	846		
07:30	522	358	300	447	822	805		
07:45	506	2108 302	1317 337	1270 425	1847 843	3378 727	3164	
08:00	522	302	296	369	818	671		
08:15	527	297	294	393	821	690		
08:30	526	305	279	445	805	750		
08:45	490	2065 267	1171 299	1168 398	1605 789	3233 665	2776	
09:00	481	293	322	351	803	644		
09:15	501	257	294	412	795	669		
09:30	490	240	322	323	812	563		
09:45	499	1971 228	1018 339	1277 317	1403 838	3248 545	2421	
10:00	455	217	288	284	743	501		
10:15	457	209	340	367	797	576		
10:30	439	196	388	344	827	540		
10:45	469	1820 193	815 398	1414 292	1287 867	3234 485	2102	
11:00	380	159	440	373	820	532		
11:15	367	129	384	326	751	455		
11:30	442	155	398	271	840	426		
11:45	415	1604 109	552 396	1618 243	1213 811	3222 352	1765	
Total	15014	16855	10294	21091	25308	37946		
Percent	59.3%	44.4%	40.7%	55.6%				
Day Total		31869		31385		63254		
Peak	06:45	-	02:30	-	10:45	-	05:00	-
Vol.	2109	-	1899	-	1620	-	2181	-
P.H.F.	0.975	-	0.957	-	0.920	-	0.986	-



PRECISION  
D A T A  
INDUSTRIES, LLC

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Route 1A  
north of Waldemar Avenue  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 A Volume  
Site Code: 13796.00

Start		SB		NB		Combin ed		5/5/2017				
Time	A.M.		P.M.	A.M.		P.M.		A.M.		P.M.		Fri
12:00	110		448	205		445		315		893		
12:15	93		419	190		411		283		830		
12:30	59		466	166		449		225		915		
12:45	75	337	453	1786	162	723	439	1744	237	1060	892	3530
01:00	74		466		88		392		162		858	
01:15	81		467		119		408		200		875	
01:30	118		470		121		435		239		905	
01:45	92	365	486	1889	100	428	424	1659	192	793	910	3548
02:00	70		469		93		469		163		938	
02:15	54		479		58		474		112		953	
02:30	44		492		65		501		109		993	
02:45	43	211	452	1892	66	282	453	1897	109	493	905	3789
03:00	57		455		51		474		108		929	
03:15	67		414		49		517		116		931	
03:30	100		448		63		474		163		922	
03:45	119	343	435	1752	83	246	487	1952	202	589	922	3704
04:00	129		427		92		499		221		926	
04:15	169		447		87		499		256		946	
04:30	193		393		114		466		307		859	
04:45	227	718	411	1678	131	424	483	1947	358	1142	894	3625
05:00	250		428		125		462		375		890	
05:15	365		404		162		492		527		896	
05:30	412		433		199		485		611		918	
05:45	470	1497	463	1728	211	697	462	1901	681	2194	925	3629
06:00	510		449		203		457		713		906	
06:15	523		428		207		510		730		938	
06:30	532		414		231		492		763		906	
06:45	511	2076	397	1688	224	865	496	1955	735	2941	893	3643
07:00	519		412		280		461		799		873	
07:15	498		404		318		459		816		863	
07:30	505		390		368		432		873		822	
07:45	487	2009	312	1518	313	1279	373	1725	800	3288	685	3243
08:00	510		284		332		371		842		655	
08:15	511		300		271		396		782		696	
08:30	471		249		305		321		776		570	
08:45	483	1975	295	1128	312	1220	386	1474	795	3195	681	2602
09:00	435		266		299		362		734		628	
09:15	399		270		339		301		738		571	
09:30	444		271		317		362		761		633	
09:45	402	1680	239	1046	342	1297	287	1312	744	2977	526	2358
10:00	408		247		319		370		727		617	
10:15	399		275		359		373		758		648	
10:30	432		248		372		347		804		595	
10:45	408	1647	182	952	342	1392	338	1428	750	3039	520	2380
11:00	396		204		419		326		815		530	
11:15	400		158		384		336		784		494	
11:30	414		156		379		337		793		493	
11:45	455	1665	146	664	402	1584	275	1274	857	3249	421	1938
Total	14523		17721		10437		20268		24960		37989	
Percent	58.2%		46.6%		41.8%		53.4%					
Day Total		32244			30705				62949			
Peak	06:15	-	01:45	-	11:00	-	03:15	-	07:15	-	01:45	-
Vol.	2085	-	1926	-	1584	-	1977	-	3331	-	3794	-
P.H.F.	0.980		0.979		0.945		0.956		0.954		0.955	



PRECISION  
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INDUSTRIES, LLC

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Route 1A  
north of Waldemar Avenue  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 A Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/6/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sat	
12:00	150	433	223	508	373	941		
12:15	135	418	244	501	379	919		
12:30	109	430	262	473	371	903		
12:45	102	496 405 1686	172 901	464 1946	274 1397	869 3632		
01:00	97	444	176	525	273	969		
01:15	106	468	160	496	266	964		
01:30	68	470	168	516	236	986		
01:45	96	367 467 1849	163 667	502 2039	259 1034	969 3888		
02:00	99	463	135	526	234	989		
02:15	87	472	139	558	226	1030		
02:30	73	488	135	521	208	1009		
02:45	60	319 499 1922	116 525	533 2138	176 844	1032 4060		
03:00	62	494	104	504	166	998		
03:15	69	492	96	532	165	1024		
03:30	99	508	67	510	166	1018		
03:45	115	345 474 1968	101 368	540 2086	216 713	1014 4054		
04:00	98	422	77	496	175	918		
04:15	123	446	121	524	244	970		
04:30	151	483	95	514	246	997		
04:45	148	520 481 1832	142 435	498 2032	290 955	979 3864		
05:00	151	460	116	514	267	974		
05:15	184	388	134	444	318	832		
05:30	214	446	148	465	362	911		
05:45	210	759 468 1762	165 563	501 1924	375 1322	969 3686		
06:00	237	491	140	459	377	950		
06:15	257	430	162	420	419	850		
06:30	307	431	225	434	532	865		
06:45	273	1074 431 1783	220 747	443 1756	493 1821	874 3539		
07:00	258	417	237	407	495	824		
07:15	285	489	272	361	557	850		
07:30	271	433	267	410	538	843		
07:45	282	1096 390 1729	257 1033	374 1552	539 2129	764 3281		
08:00	283	337	247	362	530	699		
08:15	300	322	286	321	586	643		
08:30	318	312	276	376	594	688		
08:45	341	1242 295 1266	296 1105	377 1436	637 2347	672 2702		
09:00	350	327	316	368	666	695		
09:15	335	285	350	364	685	649		
09:30	361	320	338	377	699	697		
09:45	370	1416 299 1231	360 1364	391 1500	730 2780	690 2731		
10:00	342	276	360	379	702	655		
10:15	414	256	357	340	771	596		
10:30	400	251	378	312	778	563		
10:45	449	1605 227 1010	438 1533	333 1364	887 3138	560 2374		
11:00	366	198	463	314	829	512		
11:15	413	218	478	290	891	508		
11:30	412	201	475	333	887	534		
11:45	468	1659 149 766	1149 1865	246 1183	917 3524	395 1949		
Total	10898	18804	11106	20956	22004	39760		
Percent	49.5%	47.3%	50.5%	52.7%				
Day Total		29702		32062		61764		
Peak	11:00	- 02:45	- 11:00	- 02:00	- 11:00	- 02:45	- -	-
Vol.	1659	- 1993	- 1865	- 2138	- 3524	- 4072	- -	-
P.H.F.	0.886	0.981	0.975	0.958	0.961	0.986		



PRECISION  
D A T A  
INDUSTRIES, LLC  
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Route 1A  
north of Waldemar Avenue  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 A Volume  
Site Code: 13796.00

Start		SB		NB		Combin ed		5/7/2017						
Time	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	Sun						
12:00	166	428		233	456	399	884							
12:15	127	453		228	446	355	899							
12:30	144	440		198	453	342	893							
12:45	143	433	1754	166	825 500	1855 309	1405 933	3609						
01:00	161	457		220	510	381	967							
01:15	105	411		194	481	299	892							
01:30	115	473		166	484	281	957							
01:45	128	477	1818	124	704 470	1945 252	1213 947	3763						
02:00	139	450		127	480	266	930							
02:15	70	445		120	492	190	937							
02:30	72	449		129	510	201	959							
02:45	61	440	1784	110	486 542	2024 171	828 982	3808						
03:00	64	399		100	486	164	885							
03:15	66	418		106	493	172	911							
03:30	74	452		88	440	162	892							
03:45	96	395	1664	100	394 471	1890 196	694 866	3554						
04:00	111	487		94	455	205	942							
04:15	94	455		93	471	187	926							
04:30	136	465		105	415	241	880							
04:45	130	451	1858	121	413 411	1752 251	884 862	3610						
05:00	124	388		123	440	247	828							
05:15	147	414		100	455	247	869							
05:30	158	389		150	435	308	824							
05:45	193	391	1582	155	528 467	1797 348	1150 858	3379						
06:00	170	402		128	474	298	876							
06:15	224	417		125	382	349	799							
06:30	222	391		153	471	375	862							
06:45	217	372	1582	178	584 389	1716 395	1417 761	3298						
07:00	202	374		190	435	392	809							
07:15	220	299		200	383	420	682							
07:30	241	383		186	425	427	808							
07:45	244	295	1351	188	764 350	1593 432	1671 645	2944						
08:00	202	305		210	360	412	665							
08:15	237	337		206	358	443	695							
08:30	306	307		242	378	548	685							
08:45	308	411	1360	230	888 361	1457 538	1941 772	2817						
09:00	311	267		267	343	578	610							
09:15	323	277		258	334	581	611							
09:30	390	277		358	283	748	560							
09:45	333	238	1059	291	1174 270	1230 624	2531 508	2289						
10:00	306	228		313	275	619	503							
10:15	393	202		299	317	692	519							
10:30	359	192		402	276	761	468							
10:45	427	175	797	360	1374 212	1080 787	2859 387	1877						
11:00	367	140		351	251	718	391							
11:15	392	141		383	216	775	357							
11:30	379	109		388	210	767	319							
11:45	414	116	506	421	1543 179	856 835	3095 295	1362						
Total	10011	17115		9677	19195	19688	36310							
Percent	50.8%	47.1%		49.2%	52.9%									
Day Total	27126			28872		55998								
Peak	10:45	-	04:00	-	11:00	-	02:30	-	11:00	-	02:00	-	-	-
Vol.	1565	-	1858	-	1543	-	2031	-	3095	-	3808	-	-	-
P.H.F.	0.916		0.954		0.916		0.937		0.927		0.969			



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INDUSTRIES, LLC

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Route 1A  
north of Waldemar Avenue  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 A Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/8/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Mon	
12:00	88	409	152	333	240	742		
12:15	106	386	134	379	240	765		
12:30	87	440	119	396	206	836		
12:45	89	370 392	1627 113	518 371	1479 202	888 763	3106	
01:00	84	436	89	409	173	845		
01:15	101	367	98	378	199	745		
01:30	68	423	72	394	140	817		
01:45	59	312 423	1649 75	334 424	1605 134	646 847	3254	
02:00	40	420	68	430	108	850		
02:15	47	408	71	463	118	871		
02:30	43	416	43	429	86	845		
02:45	36	166 452	1696 40	222 447	1769 76	388 899	3465	
03:00	51	437	29	525	80	962		
03:15	60	418	49	522	109	940		
03:30	77	457	50	512	127	969		
03:45	109	297 435	1747 65	193 512	2071 174	490 947	3818	
04:00	123	363	49	519	172	882		
04:15	152	358	73	511	225	869		
04:30	219	438	99	529	318	967		
04:45	245	739 372	1531 130	351 484	2043 375	1090 856	3574	
05:00	301	334	144	511	445	845		
05:15	354	344	152	571	506	915		
05:30	448	360	203	538	651	898		
05:45	507	1610 354	1392 177	676 519	2139 684	2286 873	3531	
06:00	528	334	239	488	767	822		
06:15	546	342	203	544	749	886		
06:30	545	307	238	497	783	804		
06:45	508	2127 288	1271 267	947 487	2016 775	3074 775	3287	
07:00	536	332	304	380	840	712		
07:15	535	275	336	406	871	681		
07:30	496	293	299	379	795	672		
07:45	528	2095 273	1173 304	1243 357	1522 832	3338 630	2695	
08:00	517	271	268	355	785	626		
08:15	517	282	255	360	772	642		
08:30	508	261	302	329	810	590		
08:45	484	2026 248	1062 313	1138 322	1366 797	3164 570	2428	
09:00	458	222	267	318	725	540		
09:15	433	223	296	333	729	556		
09:30	477	213	290	279	767	492		
09:45	465	1833 225	883 328	1181 287	1217 793	3014 512	2100	
10:00	388	201	313	265	701	466		
10:15	412	187	329	237	741	424		
10:30	414	172	333	268	747	440		
10:45	403	1617 166	726 353	1328 242	1012 756	2945 408	1738	
11:00	434	139	334	252	768	391		
11:15	387	137	357	211	744	348		
11:30	418	84	368	219	786	303		
11:45	355	1594 90	450 355	1414 177	859 710	3008 267	1309	
Total	14786	15207	9545	19098	24331	34305		
Percent	60.8%	44.3%	39.2%	55.7%				
Day Total		29993		28643		58636		
Peak	06:15	-	02:45	-	11:00	-	05:00	-
Vol.	2135	-	1764	-	1414	-	2139	-
P.H.F.	0.978	-	0.965	-	0.961	-	0.937	-



PRECISION  
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Route 1A  
north of Waldemar Avenue  
City, State: Boston, MA  
Client: VHB/ A. Berthaume

175607 A Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/9/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Tue	
12:00	94	421	116	307	210	728		
12:15	81	411	112	385	193	796		
12:30	62	351	124	379	186	730		
12:45	58	295 400	1583 117	469 344	1415 175	764 744	2998	
01:00	55	400	90	290	145	690		
01:15	50	410	91	362	141	772		
01:30	46	403	84	439	130	842		
01:45	44	195 393	1606 61	326 428	1519 105	521 821	3125	
02:00	42	454	71	389	113	843		
02:15	31	475	41	454	72	929		
02:30	53	419	58	502	111	921		
02:45	38	164 415	1763 53	223 498	1843 91	387 913	3606	
03:00	52	413	47	502	99	915		
03:15	70	457	35	553	105	1010		
03:30	79	457	50	525	129	982		
03:45	106	307 437	1764 65	197 527	2107 171	504 964	3871	
04:00	111	403	61	545	172	948		
04:15	156	419	81	534	237	953		
04:30	208	426	83	470	291	896		
04:45	256	731 414	1662 107	332 571	2120 363	1063 985	3782	
05:00	267	431	136	553	403	984		
05:15	320	370	151	542	471	912		
05:30	464	421	150	562	614	983		
05:45	512	1563 362	1584 218	655 543	2200 730	2218 905	3784	
06:00	613	383	218	525	831	908		
06:15	600	333	215	545	815	878		
06:30	619	339	241	528	860	867		
06:45	573	2405 301	1356 307	981 519	2117 880	3386 820	3473	
07:00	540	317	316	526	856	843		
07:15	547	324	303	480	850	804		
07:30	538	300	272	396	810	696		
07:45	511	2136 288	1229 304	1195 339	1741 815	3331 627	2970	
08:00	528	254	319	346	847	600		
08:15	540	245	295	336	835	581		
08:30	504	228	287	362	791	590		
08:45	487	2059 241	968 281	1182 346	1390 768	3241 587	2358	
09:00	463	219	293	356	756	575		
09:15	471	265	305	354	776	619		
09:30	496	246	337	323	833	569		
09:45	440	1870 200	930 294	1229 319	1352 734	3099 519	2282	
10:00	412	213	322	275	734	488		
10:15	421	187	335	298	756	485		
10:30	435	191	353	316	788	507		
10:45	418	1686 195	786 344	1354 291	1180 762	3040 486	1966	
11:00	413	138	335	300	748	438		
11:15	423	118	345	237	768	355		
11:30	396	125	374	204	770	329		
11:45	391	1623 102	483 352	1406 170	911 743	3029 272	1394	
Total	15034	15714	9549	19895	24583	35609		
Percent	61.2%	44.1%	38.8%	55.9%				
Day Total		30748		29444		60192		
Peak	06:00	-	03:00	-	11:00	-	04:45	-
Vol.	2405	-	1764	-	1406	-	2228	-
P.H.F.	0.971	-	0.928	-	0.940	-	0.975	-





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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	313	18	7	0	0	0	0	0	0	0	0	0	0	338
01:00	174	10	8	0	0	0	0	0	0	0	0	0	0	192
02:00	167	18	11	0	0	0	0	0	0	0	0	0	0	196
03:00	261	36	16	0	0	0	0	0	0	0	0	0	0	313
04:00	618	43	19	0	0	0	0	0	0	0	0	0	0	680
05:00	1461	84	34	0	0	0	0	0	0	0	0	0	0	1579
06:00	1808	110	22	0	0	0	0	0	0	0	0	0	0	1940
07:00	1774	79	15	0	0	0	0	0	0	0	0	0	0	1868
08:00	1793	98	29	0	0	0	0	0	0	0	0	0	0	1920
09:00	1818	106	20	0	0	0	0	0	0	0	0	0	0	1944
10:00	1753	97	26	0	0	0	0	0	0	0	0	0	0	1876
11:00	1580	82	26	0	0	1580	0	0	0	0	0	0	0	1688
12 PM	1488	105	25	0	0	0	0	0	0	0	0	0	0	1618
13:00	1632	89	26	0	0	1632	0	0	0	0	0	0	0	1747
14:00	1659	88	25	0	0	0	0	0	0	0	0	0	0	1772
15:00	1710	88	12	0	0	1710	0	0	0	0	0	0	0	1810
16:00	1561	63	12	0	0	0	0	0	0	0	0	0	0	1636
17:00	1537	50	9	0	0	1537	0	0	0	0	0	0	0	1596
18:00	1432	33	12	0	0	0	0	0	0	0	0	0	0	1477
19:00	1210	35	13	0	0	0	0	0	0	0	0	0	0	1258
20:00	1087	24	14	0	0	0	0	0	0	0	0	0	0	1125
21:00	890	28	10	0	0	0	0	0	0	0	0	0	0	928
22:00	756	20	9	0	0	0	0	0	0	0	0	0	0	785
23:00	496	11	5	0	0	0	0	0	0	0	0	0	0	512
Total	28978	1415	405	0	0	0	0	0	0	0	0	0	0	30798
Percent	94.1%	4.6%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	06:00	05:00											09:00
Vol.	1818	110	34											1944
PM Peak	15:00	12:00	13:00											15:00
Vol.	1710	105	26											1810



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/17														
7:00	310	9	5	0	0	0	0	0	0	0	0	0	0	324
01:00	177	10	6	0	0	0	0	0	0	0	0	0	0	193
02:00	182	15	14	0	0	0	0	0	0	0	0	0	0	211
03:00	288	31	11	0	0	0	0	0	0	0	0	0	0	330
04:00	660	37	32	0	0	0	0	0	0	0	0	0	0	729
05:00	1469	72	34	0	0	0	0	0	0	0	0	0	0	1575
06:00	1835	95	18	0	0	0	0	0	0	0	0	0	0	1948
07:00	1753	87	21	0	0	0	0	0	0	0	0	0	0	1861
08:00	1855	61	25	0	0	0	0	0	0	0	0	0	0	1941
09:00	1820	106	24	0	0	0	0	0	0	0	0	0	0	1950
10:00	1723	97	21	0	0	0	0	0	0	0	0	0	0	1841
11:00	1461	94	24	0	0	0	0	0	0	0	0	0	0	1579
12 PM	1577	81	22	0	0	0	0	0	0	0	0	0	0	1680
13:00	1631	88	24	0	0	0	0	0	0	0	0	0	0	1743
14:00	1689	85	17	0	0	0	0	0	0	0	0	0	0	1791
15:00	1740	66	11	0	0	0	0	0	0	0	0	0	0	1817
16:00	1638	62	7	0	0	0	0	0	0	0	0	0	0	1707
17:00	1547	56	9	0	0	0	0	0	0	0	0	0	0	1612
18:00	1431	49	9	0	0	0	0	0	0	0	0	0	0	1489
19:00	1242	30	10	0	0	0	0	0	0	0	0	0	0	1282
20:00	1118	30	14	0	0	0	0	0	0	0	0	0	0	1162
21:00	956	15	7	0	0	0	0	0	0	0	0	0	0	978
22:00	813	17	8	0	0	0	0	0	0	0	0	0	0	838
23:00	526	18	8	0	0	0	0	0	0	0	0	0	0	552
Total	29441	1311	381	0	0	0	0	0	0	0	0	0	0	31133
Percent	94.6%	4.2%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	09:00	05:00											09:00
Vol.	1855	106	34											1950
PM Peak	15:00	13:00	13:00											15:00
Vol.	1740	88	24											1817



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	323	7	5	0	0	0	0	0	0	0	0	0	0	335
01:00	339	18	6	0	0	0	0	0	0	0	0	0	0	363
02:00	208	9	5	0	0	0	0	0	0	0	0	0	0	222
03:00	302	15	16	0	0	0	0	0	0	0	0	0	0	333
04:00	641	37	20	0	0	0	0	0	0	0	0	0	0	698
05:00	1395	65	22	0	0	0	0	0	0	0	0	0	0	1482
06:00	1841	115	27	0	0	0	0	0	0	0	0	0	0	1983
07:00	1741	93	18	0	0	0	0	0	0	0	0	0	0	1852
08:00	1775	94	16	0	0	0	0	0	0	0	0	0	0	1885
09:00	1547	85	25	0	0	0	0	0	0	0	0	0	0	1657
10:00	1545	79	29	0	0	0	0	0	0	0	0	0	0	1653
11:00	1610	52	23	0	0	0	0	0	0	0	0	0	0	1685
12 PM	1700	90	26	0	0	0	0	0	0	0	0	0	0	1816
13:00	1732	107	28	0	0	0	0	0	0	0	0	0	0	1867
14:00	1796	76	19	0	0	0	0	0	0	0	0	0	0	1891
15:00	1616	77	24	0	0	0	0	0	0	0	0	0	0	1717
16:00	1588	63	12	0	0	0	0	0	0	0	0	0	0	1663
17:00	1677	40	11	0	0	0	0	0	0	0	0	0	0	1728
18:00	1613	60	11	0	0	0	0	0	0	0	0	0	0	1684
19:00	1445	43	8	0	0	0	0	0	0	0	0	0	0	1496
20:00	1044	34	16	0	0	0	0	0	0	0	0	0	0	1094
21:00	967	30	9	0	0	0	0	0	0	0	0	0	0	1006
22:00	914	16	8	0	0	0	0	0	0	0	0	0	0	938
23:00	650	17	1	0	0	0	0	0	0	0	0	0	0	668
Total	30009	1322	385	0	0	0	0	0	0	0	0	0	0	31716
Percent	94.6%	4.2%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	06:00	10:00											06:00
Vol.	1841	115	29											1983
PM Peak	14:00	13:00	13:00											14:00
Vol.	1796	107	28											1891



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	473	7	3	0	0	0	0	0	0	0	0	0	0	483
01:00	351	11	1	0	0	0	0	0	0	0	0	0	0	363
02:00	298	10	4	0	0	0	0	0	0	0	0	0	0	312
03:00	321	14	14	0	0	0	0	0	0	0	0	0	0	349
04:00	477	27	14	0	0	0	0	0	0	0	0	0	0	518
05:00	716	30	10	0	0	0	0	0	0	0	0	0	0	756
06:00	1025	36	9	0	0	0	0	0	0	0	0	0	0	1070
07:00	1028	50	7	0	0	0	0	0	0	0	0	0	0	1085
08:00	1176	59	10	0	0	0	0	0	0	0	0	0	0	1245
09:00	1310	42	15	0	0	0	0	0	0	0	0	0	0	1367
10:00	1609	48	5	0	0	0	0	0	0	0	0	0	0	1662
11:00	1705	35	10	0	0	0	0	0	0	0	0	0	0	1750
12 PM	1743	28	7	0	0	0	0	0	0	0	0	0	0	1778
13:00	1834	32	10	0	0	0	0	0	0	0	0	0	0	1876
14:00	1975	38	7	0	0	0	0	0	0	0	0	0	0	2020
15:00	2005	24	6	0	0	0	0	0	0	0	0	0	0	2035
16:00	1840	20	5	0	0	0	0	0	0	0	0	0	0	1865
17:00	1755	20	4	0	0	0	0	0	0	0	0	0	0	1779
18:00	1737	23	6	0	0	0	0	0	0	0	0	0	0	1766
19:00	1562	18	5	0	0	0	0	0	0	0	0	0	0	1585
20:00	1233	16	6	0	0	0	0	0	0	0	0	0	0	1255
21:00	1171	21	8	0	0	0	0	0	0	0	0	0	0	1200
22:00	966	17	3	0	0	0	0	0	0	0	0	0	0	986
23:00	746	12	3	0	0	0	0	0	0	0	0	0	0	761
Total	29056	638	172	0	0	0	0	0	0	0	0	0	0	29866
Percent	97.3%	2.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	09:00											11:00
Vol.	1705	59	15											1750
PM Peak	15:00	14:00	13:00											15:00
Vol.	2005	38	10											2035



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/1														
7	550	12	1	0	0	0	0	0	0	0	0	0	0	563
01:00	474	8	9	0	0	0	0	0	0	0	0	0	0	491
02:00	327	5	4	0	0	0	0	0	0	0	0	0	0	336
03:00	278	14	4	0	0	0	0	0	0	0	0	0	0	296
04:00	439	21	3	0	0	0	0	0	0	0	0	0	0	463
05:00	585	22	8	0	0	0	0	0	0	0	0	0	0	615
06:00	798	23	10	0	0	0	0	0	0	0	0	0	0	831
07:00	888	21	8	0	0	0	0	0	0	0	0	0	0	917
08:00	1019	21	8	0	0	0	0	0	0	0	0	0	0	1048
09:00	1317	22	4	0	0	0	0	0	0	0	0	0	0	1343
10:00	1429	29	6	0	0	0	0	0	0	0	0	0	0	1464
11:00	1543	28	6	0	0	1543	0	0	0	0	0	0	0	1577
12 PM	1746	23	1	0	0	0	0	0	0	0	0	0	0	1770
13:00	1812	19	4	0	0	0	0	0	0	0	0	0	0	1835
14:00	1754	26	4	0	0	0	0	0	0	0	0	0	0	1784
15:00	1647	21	6	0	0	1647	0	0	0	0	0	0	0	1674
16:00	1783	22	6	0	0	0	0	0	0	0	0	0	0	1811
17:00	1560	19	4	0	0	0	0	0	0	0	0	0	0	1583
18:00	1515	26	7	0	0	0	0	0	0	0	0	0	0	1548
19:00	1302	15	7	0	0	0	0	0	0	0	0	0	0	1324
20:00	1130	17	7	0	0	0	0	0	0	0	0	0	0	1154
21:00	967	17	4	0	0	0	0	0	0	0	0	0	0	988
22:00	737	17	5	0	0	0	0	0	0	0	0	0	0	759
23:00	469	16	9	0	0	0	0	0	0	0	0	0	0	494
Total	26069	464	135	0	0	0	0	0	0	0	0	0	0	26668
Percent	97.8%	1.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	06:00											11:00
Vol.	1543	29	10											1577
PM Peak	13:00	14:00	23:00											13:00
Vol.	1812	26	9											1835



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	344	13	9	0	0	0	0	0	0	0	0	0	0	366
01:00	299	12	3	0	0	0	0	0	0	0	0	0	0	314
02:00	149	10	4	0	0	0	0	0	0	0	0	0	0	163
03:00	269	24	8	0	0	0	0	0	0	0	0	0	0	301
04:00	673	42	13	0	0	0	0	0	0	0	0	0	0	728
05:00	1508	68	25	0	0	0	0	0	0	0	0	0	0	1601
06:00	1857	115	19	0	0	0	0	0	0	0	0	0	0	1991
07:00	1753	87	12	0	0	0	0	0	0	0	0	0	0	1852
08:00	1865	67	10	0	0	0	0	0	0	0	0	0	0	1942
09:00	1720	91	27	0	0	0	0	0	0	0	0	0	0	1838
10:00	1467	87	28	0	0	0	0	0	0	0	0	0	0	1582
11:00	1447	95	27	0	0	0	0	0	0	0	0	0	0	1569
12 PM	1509	100	35	0	0	0	0	0	0	0	0	0	0	1644
13:00	1522	82	24	0	0	0	0	0	0	0	0	0	0	1628
14:00	1588	68	23	0	0	0	0	0	0	0	0	0	0	1679
15:00	1624	70	22	0	0	0	0	0	0	0	0	0	0	1716
16:00	1435	64	8	0	0	0	0	0	0	0	0	0	0	1507
17:00	1357	52	8	0	0	0	0	0	0	0	0	0	0	1417
18:00	1204	34	14	0	0	0	0	0	0	0	0	0	0	1252
19:00	1124	28	8	0	0	0	0	0	0	0	0	0	0	1160
20:00	995	28	21	0	0	0	0	0	0	0	0	0	0	1044
21:00	840	25	9	0	0	0	0	0	0	0	0	0	0	874
22:00	655	19	4	0	0	0	0	0	0	0	0	0	0	678
23:00	412	10	4	0	0	0	0	0	0	0	0	0	0	426
Total	27616	1291	365	0	0	0	0	0	0	0	0	0	0	29272
Percent	94.3%	4.4%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	06:00	10:00											06:00
Vol.	1865	115	28											1991
PM Peak	15:00	12:00	12:00											15:00
Vol.	1624	100	35											1716



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/17														
7:00	274	15	4	0	0	0	0	0	0	0	0	0	0	293
01:00	192	14	6	0	0	0	0	0	0	0	0	0	0	212
02:00	143	14	12	0	0	0	0	0	0	0	0	0	0	169
03:00	260	40	12	0	0	0	0	0	0	0	0	0	0	312
04:00	635	48	21	0	0	0	0	0	0	0	0	0	0	704
05:00	1438	83	35	0	0	0	0	0	0	0	0	0	0	1556
06:00	1884	115	25	0	0	0	0	0	0	0	0	0	0	2024
07:00	1770	92	16	0	0	0	0	0	0	0	0	0	0	1878
08:00	1902	76	21	0	0	0	0	0	0	0	0	0	0	1999
09:00	1681	106	30	0	0	0	0	0	0	0	0	0	0	1817
10:00	1586	90	27	0	0	0	0	0	0	0	0	0	0	1703
11:00	1442	117	43	0	0	0	0	0	0	0	0	0	0	1602
12 PM	1455	101	38	0	0	0	0	0	0	0	0	0	0	1594
13:00	1480	81	24	0	0	0	0	0	0	0	0	0	0	1585
14:00	1655	88	23	0	0	0	0	0	0	0	0	0	0	1766
15:00	1661	75	8	0	0	0	0	0	0	0	0	0	0	1744
16:00	1556	62	11	0	0	0	0	0	0	0	0	0	0	1629
17:00	1511	56	11	0	0	0	0	0	0	0	0	0	0	1578
18:00	1362	40	10	0	0	0	0	0	0	0	0	0	0	1412
19:00	1161	35	12	0	0	0	0	0	0	0	0	0	0	1208
20:00	936	28	13	0	0	0	0	0	0	0	0	0	0	977
21:00	841	28	13	0	0	0	0	0	0	0	0	0	0	882
22:00	745	19	1	0	0	0	0	0	0	0	0	0	0	765
23:00	459	18	8	0	0	0	0	0	0	0	0	0	0	485
Total	28029	1441	424	0	0	0	0	0	0	0	0	0	0	29894
Percent	93.8%	4.8%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	11:00	11:00											06:00
Vol.	1902	117	43											2024
PM Peak	15:00	12:00	12:00											14:00
Vol.	1661	101	38											1766



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175607 B Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	589	14	6	0	0	0	0	0	0	0	0	0	0	609
01:00	304	8	11	0	0	0	0	0	0	0	0	0	0	323
02:00	201	10	6	0	0	0	0	0	0	0	0	0	0	217
03:00	199	14	6	0	0	0	0	0	0	0	0	0	0	219
04:00	309	32	21	0	0	0	0	0	0	0	0	0	0	362
05:00	579	32	16	0	0	0	0	0	0	0	0	0	0	627
06:00	756	59	14	0	0	0	0	0	0	0	0	0	0	829
07:00	1003	62	12	0	0	0	0	0	0	0	0	0	0	1077
08:00	998	91	24	0	0	0	0	0	0	0	0	0	0	1113
09:00	1127	78	21	0	0	0	0	0	0	0	0	0	0	1226
10:00	1245	87	33	0	0	0	0	0	0	0	0	0	0	1365
11:00	1323	107	28	0	0	0	0	0	0	0	0	0	0	1458
12 PM	1409	66	22	0	0	0	0	0	0	0	0	0	0	1497
13:00	1325	84	11	0	0	0	0	0	0	0	0	0	0	1420
14:00	1515	66	3	0	0	0	0	0	0	0	0	0	0	1584
15:00	1599	85	15	0	0	0	0	0	0	0	0	0	0	1699
16:00	1681	72	11	0	0	0	0	0	0	0	0	0	0	1764
17:00	1421	30	12	0	0	0	0	0	0	0	0	0	0	1463
18:00	1786	59	20	0	0	0	0	0	0	0	0	0	0	1865
19:00	1720	40	7	0	0	0	0	0	0	0	0	0	0	1767
20:00	1354	30	7	0	0	0	0	0	0	0	0	0	0	1391
21:00	1205	29	12	0	0	0	0	0	0	0	0	0	0	1246
22:00	1036	27	11	0	0	0	0	0	0	0	0	0	0	1074
23:00	958	17	6	0	0	0	0	0	0	0	0	0	0	981
Total	25642	1199	335	0	0	0	0	0	0	0	0	0	0	27176
Percent	94.4%	4.4%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	10:00											11:00
Vol.	1323	107	33											1458
PM Peak	18:00	15:00	12:00											18:00
Vol.	1786	85	22											1865





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175607 B Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/17														
7:00	551	8	8	0	0	0	0	0	0	0	0	0	0	567
01:00	310	13	8	0	0	0	0	0	0	0	0	0	0	331
02:00	251	7	5	0	0	0	0	0	0	0	0	0	0	263
03:00	195	13	8	0	0	0	0	0	0	0	0	0	0	216
04:00	341	11	17	0	0	0	0	0	0	0	0	0	0	369
05:00	606	40	19	0	0	0	0	0	0	0	0	0	0	665
06:00	876	55	13	0	0	0	0	0	0	0	0	0	0	944
07:00	1119	55	22	0	0	0	0	0	0	0	0	0	0	1196
08:00	1014	87	21	0	0	0	0	0	0	0	0	0	0	1122
09:00	1122	92	21	0	0	0	0	0	0	0	0	0	0	1235
10:00	1250	80	26	0	0	0	0	0	0	0	0	0	0	1356
11:00	1345	114	25	0	0	0	0	0	0	0	0	0	0	1484
12 PM	1504	68	17	0	0	0	0	0	0	0	0	0	0	1589
13:00	1427	94	26	0	0	0	0	0	0	0	0	0	0	1547
14:00	1697	80	11	0	0	0	0	0	0	0	0	0	0	1788
15:00	1821	68	19	0	0	0	0	0	0	0	0	0	0	1908
16:00	1785	72	21	0	0	0	0	0	0	0	0	0	0	1878
17:00	1829	76	9	0	0	0	0	0	0	0	0	0	0	1914
18:00	1824	58	11	0	0	0	0	0	0	0	0	0	0	1893
19:00	1657	53	16	0	0	0	0	0	0	0	0	0	0	1726
20:00	1472	34	7	0	0	0	0	0	0	0	0	0	0	1513
21:00	1270	37	16	0	0	0	0	0	0	0	0	0	0	1323
22:00	1197	15	15	0	0	0	0	0	0	0	0	0	0	1227
23:00	1150	23	4	0	0	0	0	0	0	0	0	0	0	1177
Total	27613	1253	365	0	0	0	0	0	0	0	0	0	0	29231
Percent	94.5%	4.3%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	10:00											11:00
Vol.	1345	114	26											1484
PM Peak	17:00	13:00	13:00											17:00
Vol.	1829	94	26											1914



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175607 B Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	672	18	8	0	0	0	0	0	0	0	0	0	0	698
01:00	404	17	4	0	0	0	0	0	0	0	0	0	0	425
02:00	247	9	7	0	0	0	0	0	0	0	0	0	0	263
03:00	206	16	16	0	0	0	0	0	0	0	0	0	0	238
04:00	373	23	18	0	0	0	0	0	0	0	0	0	0	414
05:00	616	45	16	0	0	0	0	0	0	0	0	0	0	677
06:00	763	31	13	0	0	0	0	0	0	0	0	0	0	807
07:00	1095	77	16	0	0	0	0	0	0	0	0	0	0	1188
08:00	1060	91	20	0	0	0	0	0	0	0	0	0	0	1171
09:00	1110	94	26	0	0	0	0	0	0	0	0	0	0	1230
10:00	1201	89	32	0	0	0	0	0	0	0	0	0	0	1322
11:00	1329	78	39	0	0	0	0	0	0	0	0	0	0	1446
12 PM	1468	98	24	0	0	0	0	0	0	0	0	0	0	1590
13:00	1387	76	19	0	0	0	0	0	0	0	0	0	0	1482
14:00	1651	77	22	0	0	0	0	0	0	0	0	0	0	1750
15:00	1656	57	18	0	0	0	0	0	0	0	0	0	0	1731
16:00	1709	39	8	0	0	0	0	0	0	0	0	0	0	1756
17:00	1542	64	12	0	0	0	0	0	0	0	0	0	0	1618
18:00	1698	49	11	0	0	0	0	0	0	0	0	0	0	1758
19:00	1539	44	16	0	0	0	0	0	0	0	0	0	0	1599
20:00	1306	27	7	0	0	0	0	0	0	0	0	0	0	1340
21:00	1246	38	24	0	0	0	0	0	0	0	0	0	0	1308
22:00	1283	25	12	0	0	0	0	0	0	0	0	0	0	1320
23:00	1184	17	8	0	0	0	0	0	0	0	0	0	0	1209
Total	26745	1199	396	0	0	0	0	0	0	0	0	0	0	28340
Percent	94.4%	4.2%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	11:00											11:00
Vol.	1329	94	39											1446
PM Peak	16:00	12:00	12:00											18:00
Vol.	1709	98	24											1758



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175607 B Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	855	15	4	0	0	0	0	0	0	0	0	0	0	874
01:00	727	10	2	0	0	0	0	0	0	0	0	0	0	739
02:00	447	12	4	0	0	0	0	0	0	0	0	0	0	463
03:00	332	9	4	0	0	0	0	0	0	0	0	0	0	345
04:00	380	21	5	0	0	0	0	0	0	0	0	0	0	406
05:00	526	26	5	0	0	0	0	0	0	0	0	0	0	557
06:00	686	25	6	0	0	0	0	0	0	0	0	0	0	717
07:00	959	32	8	0	0	0	0	0	0	0	0	0	0	999
08:00	1010	47	6	0	0	0	0	0	0	0	0	0	0	1063
09:00	1254	43	15	0	0	0	0	0	0	0	0	0	0	1312
10:00	1356	39	10	0	0	0	0	0	0	0	0	0	0	1405
11:00	1595	41	12	0	0	0	0	0	0	0	0	0	0	1648
12 PM	1673	33	5	0	0	0	0	0	0	0	0	0	0	1711
13:00	1764	34	8	0	0	0	0	0	0	0	0	0	0	1806
14:00	1839	30	6	0	0	0	0	0	0	0	0	0	0	1875
15:00	1867	35	5	0	0	0	0	0	0	0	0	0	0	1907
16:00	1790	29	4	0	0	0	0	0	0	0	0	0	0	1823
17:00	1759	29	6	0	0	0	0	0	0	0	0	0	0	1794
18:00	1600	24	4	0	0	0	0	0	0	0	0	0	0	1628
19:00	1562	26	5	0	0	0	0	0	0	0	0	0	0	1593
20:00	1340	19	3	0	0	0	0	0	0	0	0	0	0	1362
21:00	1401	16	3	0	0	0	0	0	0	0	0	0	0	1420
22:00	1271	24	4	0	0	0	0	0	0	0	0	0	0	1299
23:00	1116	17	3	0	0	0	0	0	0	0	0	0	0	1136
Total	29109	636	137	0	0	0	0	0	0	0	0	0	0	29882
Percent	97.4%	2.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	09:00											11:00
Vol.	1595	47	15											1648
PM Peak	15:00	15:00	13:00											15:00
Vol.	1867	35	8											1907



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/1														
7	755	15	2	0	0	0	0	0	0	0	0	0	0	772
01:00	671	18	2	0	0	0	0	0	0	0	0	0	0	691
02:00	453	12	1	0	0	0	0	0	0	0	0	0	0	466
03:00	361	8	3	0	0	0	0	0	0	0	0	0	0	372
04:00	389	15	5	0	0	0	0	0	0	0	0	0	0	409
05:00	510	19	3	0	0	0	0	0	0	0	0	0	0	532
06:00	554	17	3	0	0	0	0	0	0	0	0	0	0	574
07:00	735	22	4	0	0	0	0	0	0	0	0	0	0	761
08:00	832	22	9	0	0	0	0	0	0	0	0	0	0	863
09:00	1104	21	3	0	0	0	0	0	0	0	0	0	0	1128
10:00	1268	21	4	0	0	0	0	0	0	0	0	0	0	1293
11:00	1398	31	4	0	0	0	0	0	0	0	0	0	0	1433
12 PM	1675	28	3	0	0	0	0	0	0	0	0	0	0	1706
13:00	1775	17	10	0	0	0	0	0	0	0	0	0	0	1802
14:00	1822	25	2	0	0	0	0	0	0	0	0	0	0	1849
15:00	1736	33	3	0	0	0	0	0	0	0	0	0	0	1772
16:00	1600	21	4	0	0	0	0	0	0	0	0	0	0	1625
17:00	1736	22	4	0	0	0	0	0	0	0	0	0	0	1762
18:00	1580	21	6	0	0	0	0	0	0	0	0	0	0	1607
19:00	1488	12	3	0	0	0	0	0	0	0	0	0	0	1503
20:00	1354	25	6	0	0	0	0	0	0	0	0	0	0	1385
21:00	1144	15	7	0	0	0	0	0	0	0	0	0	0	1166
22:00	1010	18	6	0	0	0	0	0	0	0	0	0	0	1034
23:00	809	15	7	0	0	0	0	0	0	0	0	0	0	831
Total	26759	473	104	0	0	0	0	0	0	0	0	0	0	27336
Percent	97.9%	1.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	08:00											11:00
Vol.	1398	31	9											1433
PM Peak	14:00	15:00	13:00											14:00
Vol.	1822	33	10											1849



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175607 B Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	484	14	4	0	0	0	0	0	0	0	0	0	0	502
01:00	305	8	5	0	0	0	0	0	0	0	0	0	0	318
02:00	216	2	4	0	0	0	0	0	0	0	0	0	0	222
03:00	171	7	4	0	0	0	0	0	0	0	0	0	0	182
04:00	310	9	7	0	0	0	0	0	0	0	0	0	0	326
05:00	599	42	10	0	0	0	0	0	0	0	0	0	0	651
06:00	845	44	21	0	0	0	0	0	0	0	0	0	0	910
07:00	1053	56	15	0	0	0	0	0	0	0	0	0	0	1124
08:00	1002	74	20	0	0	0	0	0	0	0	0	0	0	1096
09:00	1041	71	14	0	0	0	0	0	0	0	0	0	0	1126
10:00	1148	100	37	0	0	0	0	0	0	0	0	0	0	1285
11:00	1215	107	19	0	0	0	0	0	0	0	0	0	0	1341
12 PM	1293	83	24	0	0	0	0	0	0	0	0	0	0	1400
13:00	1411	86	20	0	0	0	0	0	0	0	0	0	0	1517
14:00	1561	59	23	0	0	0	0	0	0	0	0	0	0	1643
15:00	1777	72	17	0	0	0	0	0	0	0	0	0	0	1866
16:00	1706	87	27	0	0	0	0	0	0	0	0	0	0	1820
17:00	1766	67	17	0	0	0	0	0	0	0	0	0	0	1850
18:00	1740	58	13	0	0	0	0	0	0	0	0	0	0	1811
19:00	1355	47	6	0	0	0	0	0	0	0	0	0	0	1408
20:00	1254	20	4	0	0	0	0	0	0	0	0	0	0	1278
21:00	1120	34	13	0	0	0	0	0	0	0	0	0	0	1167
22:00	922	26	13	0	0	0	0	0	0	0	0	0	0	961
23:00	805	13	7	0	0	0	0	0	0	0	0	0	0	825
Total	25099	1186	344	0	0	0	0	0	0	0	0	0	0	26629
Percent	94.3%	4.5%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	10:00											11:00
Vol.	1215	107	37											1341
PM Peak	15:00	16:00	16:00											15:00
Vol.	1777	87	27											1866



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175607 B Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/17														
7:00	444	10	3	0	0	0	0	0	0	0	0	0	0	457
01:00	303	14	8	0	0	0	0	0	0	0	0	0	0	325
02:00	202	9	5	0	0	0	0	0	0	0	0	0	0	216
03:00	166	7	15	0	0	0	0	0	0	0	0	0	0	188
04:00	277	27	20	0	0	0	0	0	0	0	0	0	0	324
05:00	571	46	14	0	0	0	0	0	0	0	0	0	0	631
06:00	863	38	20	0	0	0	0	0	0	0	0	0	0	921
07:00	980	74	22	0	0	0	0	0	0	0	0	0	0	1076
08:00	1028	65	25	0	0	0	0	0	0	0	0	0	0	1118
09:00	1053	88	31	0	0	0	0	0	0	0	0	0	0	1172
10:00	1169	99	30	0	0	0	0	0	0	0	0	0	0	1298
11:00	1219	91	29	0	0	0	0	0	0	0	0	0	0	1339
12 PM	1228	79	18	0	0	0	0	0	0	0	0	0	0	1325
13:00	1281	83	38	0	0	0	0	0	0	0	0	0	0	1402
14:00	1597	66	24	0	0	0	0	0	0	0	0	0	0	1687
15:00	1770	79	20	0	0	0	0	0	0	0	0	0	0	1869
16:00	1792	81	13	0	0	0	0	0	0	0	0	0	0	1886
17:00	1862	65	11	0	0	0	0	0	0	0	0	0	0	1938
18:00	1818	51	17	0	0	0	0	0	0	0	0	0	0	1886
19:00	1548	41	9	0	0	0	0	0	0	0	0	0	0	1598
20:00	1277	29	10	0	0	0	0	0	0	0	0	0	0	1316
21:00	1227	42	13	0	0	0	0	0	0	0	0	0	0	1282
22:00	1121	15	8	0	0	0	0	0	0	0	0	0	0	1144
23:00	869	24	8	0	0	0	0	0	0	0	0	0	0	901
Total	25665	1223	411	0	0	0	0	0	0	0	0	0	0	27299
Percent	94.0%	4.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	09:00											11:00
Vol.	1219	99	31											1339
PM Peak	17:00	13:00	13:00											17:00
Vol.	1862	83	38											1938



PRECISION  
D A T A  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Route 1A  
north of Tomasello Drive  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 B Volume  
Site Code: 13796.00

Start Time	5/3/2017		5/4/2017		5/5/2017		5/6/2017		5/7/2017		5/8/2017		5/9/2017		Week Average	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	338	609	324	567	335	698	483	874	563	772	366	502	293	457	386	640
01:00	192	323	193	331	363	425	363	739	491	691	314	318	212	325	304	450
02:00	196	217	211	263	222	263	312	463	336	466	163	222	169	216	230	301
03:00	313	219	330	216	333	238	349	345	296	372	301	182	312	188	319	251
04:00	680	362	729	369	698	414	518	406	463	409	728	326	704	324	646	373
05:00	1579	627	1575	665	1482	677	756	557	615	532	1601	651	1556	631	1309	620
06:00	1940	829	1948	944	1983	807	1070	717	831	574	1991	910	2024	921	1684	815
07:00	1868	1077	1861	1196	1852	1188	1085	999	917	761	1852	1124	1878	1076	1616	1060
08:00	1920	1113	1941	1122	1885	1171	1245	1063	1048	863	1942	1096	1999	1118	1711	1078
09:00	1944	1226	1950	1235	1657	1230	1367	1312	1343	1128	1838	1126	1817	1172	1702	1204
10:00	1876	1365	1841	1356	1653	1322	1662	1405	1464	1293	1582	1285	1703	1298	1683	1332
11:00	1688	1458	1579	1484	1685	1446	1750	1648	1577	1433	1569	1341	1602	1339	1636	1450
12:00 PM	1618	1497	1680	1589	1816	1590	1778	1711	1770	1706	1644	1400	1594	1325	1700	1545
01:00	1747	1420	1743	1547	1867	1482	1876	1806	1835	1802	1628	1517	1585	1402	1754	1568
02:00	1772	1584	1791	1788	1891	1750	2020	1875	1784	1849	1679	1643	1766	1687	1815	1739
03:00	1810	1699	1817	1908	1717	1731	2035	1907	1674	1772	1716	1866	1744	1869	1788	1822
04:00	1636	1764	1707	1878	1663	1756	1865	1823	1811	1625	1507	1820	1629	1886	1688	1793
05:00	1596	1463	1612	1914	1728	1618	1779	1794	1583	1762	1417	1850	1578	1938	1613	1763
06:00	1477	1865	1489	1893	1684	1758	1766	1628	1548	1607	1252	1811	1412	1886	1518	1778
07:00	1258	1767	1282	1726	1496	1599	1585	1593	1324	1503	1160	1408	1208	1598	1330	1599
08:00	1125	1391	1162	1513	1094	1340	1255	1362	1154	1385	1044	1278	977	1316	1116	1369
09:00	928	1246	978	1323	1006	1308	1200	1420	988	1166	874	1167	882	1282	979	1273
10:00	785	1074	838	1227	938	1320	986	1299	759	1034	678	961	765	1144	821	1151
11:00	512	981	552	1177	668	1209	761	1136	494	831	426	825	485	901	557	1009
Total Day	30798	27176	31133	29231	31716	28340	29866	29882	26668	27336	29272	26629	29894	27299	29905	27983
	57974		60364		60056		59748		54004		55901		57193		57888	
AM Peak	09:00	11:00	09:00	11:00	06:00	11:00	11:00	11:00	11:00	11:00	06:00	11:00	06:00	11:00	08:00	11:00
Vol.	1944	1458	1950	1484	1983	1446	1750	1648	1577	1433	1991	1341	2024	1339	1711	1450
PM Peak	15:00	18:00	15:00	17:00	14:00	18:00	15:00	15:00	13:00	14:00	15:00	15:00	14:00	17:00	14:00	15:00
Vol.	1810	1865	1817	1914	1891	1758	2035	1907	1835	1849	1716	1866	1766	1938	1815	1822

Comb. Total	57974	60364	60056	59748	54004	55901	57193	57888
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ADT	ADT 57,891	AADT 57,891
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PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Route 1A  
north of Tomasello Drive  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 B Volume  
Site Code: 13796.00

Start	SB				NB				Combin ed		5/3/2017			
Time	A.M.	P.M.		A.M.	P.M.		A.M.	P.M.		Wed				
12:00	99		371	180		382	279		753					
12:15	89		397	167		367	256		764					
12:30	90		432	126		370	216		802					
12:45	60	338	418	1618	136	609	378	1497	196	947	796	3115		
01:00	64		428		97		366		161		794			
01:15	38		426		93		355		131		781			
01:30	49		469		66		353		115		822			
01:45	41	192	424	1747	67	323	346	1420	108	515	770	3167		
02:00	43		431		54		401		97		832			
02:15	44		453		56		402		100		855			
02:30	49		448		56		390		105		838			
02:45	60	196	440	1772	51	217	391	1584	111	413	831	3356		
03:00	57		460		50		435		107		895			
03:15	61		465		45		429		106		894			
03:30	89		443		56		409		145		852			
03:45	106	313	442	1810	68	219	426	1699	174	532	868	3509		
04:00	109		422		71		417		180		839			
04:15	152		412		86		468		238		880			
04:30	192		390		93		441		285		831			
04:45	227	680	412	1636	112	362	438	1764	339	1042	850	3400		
05:00	285		426		124		443		409		869			
05:15	359		390		144		467		503		857			
05:30	443		411		163		309		606		720			
05:45	492	1579	369	1596	196	627	244	1463	688	2206	613	3059		
06:00	488		405		196		445		684		850			
06:15	496		390		188		429		684		819			
06:30	514		374		189		495		703		869			
06:45	442	1940	308	1477	256	829	496	1865	698	2769	804	3342		
07:00	453		336		222		441		675		777			
07:15	492		287		306		477		798		764			
07:30	451		317		296		455		747		772			
07:45	472	1868	318	1258	253	1077	394	1767	725	2945	712	3025		
08:00	475		297		275		351		750		648			
08:15	471		282		281		338		752		620			
08:30	469		283		253		364		722		647			
08:45	505	1920	263	1125	304	1113	338	1391	809	3033	601	2516		
09:00	492		262		271		301		763		563			
09:15	500		255		321		338		821		593			
09:30	461		201		323		279		784		480			
09:45	491	1944	210	928	311	1226	328	1246	802	3170	538	2174		
10:00	452		204		332		285		784		489			
10:15	480		191		313		254		793		445			
10:30	485		185		365		268		850		453			
10:45	459	1876	205	785	355	1365	267	1074	814	3241	472	1859		
11:00	435		147		393		282		828		429			
11:15	416		133		351		263		767		396			
11:30	419		121		349		254		768		375			
11:45	418	1688	111	512	365	1458	182	981	783	3146	293	1493		
Total	14534		16264		9425		17751		23959		34015			
Percent	60.7%		47.8%		39.3%		52.2%							
Day Total		30798			27176			57974						
Peak	05:45	-	02:30	-	10:30	-	06:30	-	10:15	-	03:00	-	-	-
Vol.	1990	-	1813	-	1464	-	1909	-	3285	-	3509	-	-	-
P.H.F.	0.968		0.975		0.931		0.962		0.966		0.980			





PRECISION  
D A T A  
INDUSTRIES, LLC

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Route 1A  
north of Tomasello Drive  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 B Volume  
Site Code: 13796.00

Start	SB				NB				Combin ed		5/4/2017		
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		Thu
12:00	84		436		177		455		261		891		
12:15	93		445		145		400		238		845		
12:30	74		412		120		383		194		795		
12:45	73	324	387	1680	125	567	351	1589	198	891	738	3269	
01:00	54		457		107		366		161		823		
01:15	56		419		92		413		148		832		
01:30	43		397		80		358		123		755		
01:45	40	193	470	1743	52	331	410	1547	92	524	880	3290	
02:00	47		454		59		458		106		912		
02:15	47		386		79		436		126		822		
02:30	53		483		61		463		114		946		
02:45	64	211	468	1791	64	263	431	1788	128	474	899	3579	
03:00	45		470		44		475		89		945		
03:15	59		434		55		456		114		890		
03:30	102		475		52		468		154		943		
03:45	124	330	438	1817	65	216	509	1908	189	546	947	3725	
04:00	120		423		86		433		206		856		
04:15	180		410		83		495		263		905		
04:30	187		431		103		476		290		907		
04:45	242	729	443	1707	97	369	474	1878	339	1098	917	3585	
05:00	266		415		160		497		426		912		
05:15	369		381		157		464		526		845		
05:30	455		409		155		475		610		884		
05:45	485	1575	407	1612	193	665	478	1914	678	2240	885	3526	
06:00	519		395		218		437		737		832		
06:15	491		375		240		461		731		836		
06:30	491		369		228		483		719		852		
06:45	447	1948	350	1489	258	944	512	1893	705	2892	862	3382	
07:00	437		301		287		473		724		774		
07:15	459		349		303		424		762		773		
07:30	473		340		283		424		756		764		
07:45	492	1861	292	1282	323	1196	405	1726	815	3057	697	3008	
08:00	470		292		279		338		749		630		
08:15	499		304		288		376		787		680		
08:30	492		302		273		418		765		720		
08:45	480	1941	264	1162	282	1122	381	1513	762	3063	645	2675	
09:00	488		278		308		319		796		597		
09:15	488		244		287		387		775		631		
09:30	480		229		318		307		798		536		
09:45	494	1950	227	978	322	1235	310	1323	816	3185	537	2301	
10:00	445		217		271		268		716		485		
10:15	475		211		329		357		804		568		
10:30	432		200		368		317		800		517		
10:45	489	1841	210	838	388	1356	285	1227	877	3197	495	2065	
11:00	364		161		385		348		749		509		
11:15	369		130		374		307		743		437		
11:30	436		151		368		286		804		437		
11:45	410	1579	110	552	357	1484	236	1177	767	3063	346	1729	
Total	14482		16651		9748		19483		24230		36134		
Percent	59.8%		46.1%		40.2%		53.9%						
Day Total		31133				29231				60364			
Peak	05:45	-	02:30	-	10:30	-	04:15	-	10:15	-	03:00	-	-
Vol.	1986	-	1855	-	1515	-	1942	-	3230	-	3725	-	-
P.H.F.	0.957		0.960		0.976		0.977		0.921		0.983		



PRECISION  
D A T A  
INDUSTRIES, LLC

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Route 1A  
north of Tomasello Drive  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 B Volume  
Site Code: 13796.00

Start	SB		NB		Combin ed		5/5/2017
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri
12:00	111	455	187	398	298	853	
12:15	93	434	197	361	290	795	
12:30	55	461	161	412	216	873	
12:45	76	335 466	153	698 419	1590 229	1033 885	3406
01:00	74	464	89	353	163	817	
01:15	82	465	122	367	204	832	
01:30	115	472	113	392	228	864	
01:45	92	363 466	101	425 370	1482 193	788 836	3349
02:00	72	462	85	432	157	894	
02:15	57	475	55	437	112	912	
02:30	44	477	59	466	103	943	
02:45	49	222 477	64	263 415	1750 113	485 892	3641
03:00	56	446	53	421	109	867	
03:15	63	408	47	452	110	860	
03:30	99	447	58	428	157	875	
03:45	115	333 416	80	238 430	1731 195	571 846	3448
04:00	118	425	91	444	209	869	
04:15	159	441	83	444	242	885	
04:30	190	404	112	424	302	828	
04:45	231	698 393	128	414 444	1756 359	1112 837	3419
05:00	235	433	120	391	355	824	
05:15	365	402	161	416	526	818	
05:30	410	422	197	408	607	830	
05:45	472	1482 471	199	677 403	1618 671	2159 874	3346
06:00	519	448	197	409	716	857	
06:15	499	421	192	454	691	875	
06:30	480	413	218	447	698	860	
06:45	485	1983 402	200	807 448	1758 685	2790 850	3442
07:00	462	420	258	433	720	853	
07:15	459	394	296	422	755	816	
07:30	461	379	341	405	802	784	
07:45	470	1852 303	293	1188 339	1599 763	3040 642	3095
08:00	472	278	318	343	790	621	
08:15	499	301	258	356	757	657	
08:30	458	238	289	294	747	532	
08:45	456	1885 277	306	1171 347	1340 762	3056 624	2434
09:00	422	253	280	339	702	592	
09:15	403	266	328	308	731	574	
09:30	440	258	302	369	742	627	
09:45	392	1657 229	320	1230 292	1308 712	2887 521	2314
10:00	401	252	302	343	703	595	
10:15	395	258	332	349	727	607	
10:30	446	244	352	320	798	564	
10:45	411	1653 184	336	1322 308	1320 747	2975 492	2258
11:00	396	204	387	303	783	507	
11:15	409	156	364	321	773	477	
11:30	419	157	349	324	768	481	
11:45	461	1685 151	346	1446 261	1209 807	3131 412	1877
Total	14148	17568	9879	18461	24027	36029	
Percent	58.9%	48.8%	41.1%	51.2%			
Day Total	31716		28340		60056		
Peak	06:00	- 02:00	- 11:00	- 06:15	- 11:00	- 02:00	-
Vol.	1983	- 1891	- 1446	- 1782	- 3131	- 3641	-
P.H.F.	0.955	0.991	0.934	0.981	0.970	0.965	



PRECISION  
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Route 1A  
north of Tomasello Drive  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 B Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/6/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sat	
12:00	149	464	217	437	366	901		
12:15	132	415	235	425	367	840		
12:30	103	464	247	423	350	887		
12:45	99	483 435	1778 175	874 426	1711 274	1357 861	3489	
01:00	99	443	195	468	294	911		
01:15	102	477	160	429	262	906		
01:30	66	495	197	452	263	947		
01:45	96	363 461	1876 187	739 457	1806 283	1102 918	3682	
02:00	97	474	115	460	212	934		
02:15	84	505	122	480	206	985		
02:30	70	518	128	451	198	969		
02:45	61	312 523	2020 98	463 484	1875 159	775 1007	3895	
03:00	65	510	95	457	160	967		
03:15	71	519	93	483	164	1002		
03:30	98	511	63	454	161	965		
03:45	115	349 495	2035 94	345 513	1907 209	694 1008	3942	
04:00	95	440	75	450	170	890		
04:15	122	467	108	473	230	940		
04:30	152	469	91	442	243	911		
04:45	149	518 489	1865 132	406 458	1823 281	924 947	3688	
05:00	156	459	113	462	269	921		
05:15	181	399	137	405	318	804		
05:30	208	457	145	446	353	903		
05:45	211	756 464	1779 162	557 481	1794 373	1313 945	3573	
06:00	243	483	136	417	379	900		
06:15	257	418	159	383	416	801		
06:30	293	436	209	412	502	848		
06:45	277	1070 429	1766 213	717 416	1628 490	1787 845	3394	
07:00	261	355	227	431	488	786		
07:15	275	435	267	390	542	825		
07:30	265	409	253	410	518	819		
07:45	284	1085 386	1585 252	999 362	1593 536	2084 748	3178	
08:00	277	316	240	359	517	675		
08:15	313	327	284	296	597	623		
08:30	312	314	264	357	576	671		
08:45	343	1245 298	1255 275	1063 350	1362 618	2308 648	2617	
09:00	319	321	309	351	628	672		
09:15	322	277	342	348	664	625		
09:30	348	308	327	350	675	658		
09:45	378	1367 294	1200 334	1312 371	1420 712	2679 665	2620	
10:00	362	266	308	343	670	609		
10:15	417	251	349	338	766	589		
10:30	432	238	349	302	781	540		
10:45	451	1662 231	986 399	1405 316	1299 850	3067 547	2285	
11:00	382	200	414	297	796	497		
11:15	451	214	421	276	872	490		
11:30	439	198	415	325	854	523		
11:45	478	1750 149	761 398	1648 238	1136 876	3398 387	1897	
Total	10960	18906	10528	19354	21488	38260		
Percent	51.0%	49.4%	49.0%	50.6%				
Day Total		29866		29882		59748		
Peak	11:00	-	02:30	-	10:45	-	03:00	-
Vol.	1750	-	2070	-	1649	-	1907	-
P.H.F.	0.915	-	0.989	-	0.979	-	0.929	-



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Route 1A  
north of Tomasello Drive  
City, State: Boston, MA  
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175607 B Volume  
Site Code: 13796.00

Start	SB		NB		Combin ed		5/7/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sun	
12:00	163	432	223	419	386	851		
12:15	126	450	213	420	339	870		
12:30	133	459	176	414	309	873		
12:45	141	563	429	1770	160	772	453	1706
01:00	152	465	216	477	368	1335	882	3476
01:15	99	415	189	431	288		846	
01:30	113	477	162	458	275		935	
01:45	127	491	478	1835	124	691	436	1802
02:00	137	463	121	445	258	1182	914	3637
02:15	68	452	112	450	180		908	
02:30	67	449	126	465	193		902	
02:45	64	336	420	1784	107	466	489	1849
03:00	64	409	93	464	157	802	873	3633
03:15	64	421	108	471	172		892	
03:30	77	452	87	397	164		849	
03:45	91	296	392	1674	84	372	440	1772
04:00	109	473	101	422	210	668	832	3446
04:15	94	447	87	436	181		895	
04:30	134	462	106	390	240		883	
04:45	126	463	429	1811	115	409	377	1625
05:00	124	385	127	448	251	872	806	3436
05:15	144	412	103	431	247		833	
05:30	156	404	146	426	302		843	
05:45	191	615	382	1583	156	532	457	1762
06:00	178	387	129	443	307	1147	839	3345
06:15	218	415	122	360	340		830	
06:30	217	377	151	437	368		775	
06:45	218	831	369	1548	172	574	367	1607
07:00	208	369	179	408	387	1405	390	1405
07:15	224	299	199	368	423		736	3155
07:30	251	366	192	399	443		777	
07:45	234	917	290	1324	191	761	328	1503
08:00	200	280	207	350	407	1678	618	2827
08:15	237	304	195	337	432		630	
08:30	306	285	235	360	541		641	
08:45	305	1048	285	1154	226	863	338	1385
09:00	303	238	264	312	567	1911	623	2539
09:15	330	276	249	323	579		550	
09:30	384	253	344	273	728		599	
09:45	326	1343	221	988	271	1128	258	1166
10:00	313	213	293	266	606	2471	479	2154
10:15	377	191	290	303	667		479	
10:30	355	187	365	261	720		448	
10:45	419	1464	168	759	345	1293	204	1034
11:00	366	139	319	245	685	2757	372	1793
11:15	398	142	374	209	772		384	
11:30	385	104	363	200	748		351	
11:45	428	1577	109	494	377	1433	200	831
							748	
							304	
							286	1325
							805	3010
							286	1325
Total	9944	16724	9294	18042	19238		34766	
Percent	51.7%	48.1%	48.3%	51.9%				
Day Total		26668		27336		54004		
Peak	11:00	-	01:30	-	11:00	-	02:30	-
Vol.	1577	-	1870	-	1433	-	1889	-
P.H.F.	0.921	-	0.978	-	0.950	-	0.966	-



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Route 1A  
north of Tomasello Drive  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 B Volume  
Site Code: 13796.00

Start	SB				NB				Combin ed		5/8/2017		
Time	A.M.	P.M.		A.M.	P.M.		A.M.	P.M.		Mon			
12:00	95		425	149		315		244		740			
12:15	104		377	129		349		233		726			
12:30	83		449	112		383		195		832			
12:45	84	366	393	1644	112	502	353	1400	196	868	746	3044	
01:00	82		416	86		375		168		791			
01:15	107		373	94		359		201		732			
01:30	66		420	69		379		135		799			
01:45	59	314	419	1628	69	318	404	1517	128	632	823	3145	
02:00	39		421	68		397		107		818			
02:15	47		389	70		431		117		820			
02:30	41		418	44		400		85		818			
02:45	36	163	451	1679	40	222	415	1643	76	385	866	3322	
03:00	55		427	32		482		87		909			
03:15	58		409	45		479		103		888			
03:30	77		459	43		460		120		919			
03:45	111	301	421	1716	62	182	445	1866	173	483	866	3582	
04:00	119		360	47		477		166		837			
04:15	151		345	65		435		216		780			
04:30	213		438	89		479		302		917			
04:45	245	728	364	1507	125	326	429	1820	370	1054	793	3327	
05:00	300		348	140		449		440		797			
05:15	349		343	151		482		500		825			
05:30	450		367	191		459		641		826			
05:45	502	1601	359	1417	169	651	460	1850	671	2252	819	3267	
06:00	536		329	225		432		761		761			
06:15	512		337	205		491		717		828			
06:30	503		313	235		435		738		748			
06:45	440	1991	273	1252	245	910	453	1811	685	2901	726	3063	
07:00	464		331	281		356		745		687			
07:15	463		274	303		354		766		628			
07:30	444		293	270		355		714		648			
07:45	481	1852	262	1160	270	1124	343	1408	751	2976	605	2568	
08:00	470		269	265		332		735		601			
08:15	509		278	249		330		758		608			
08:30	490		255	285		315		775		570			
08:45	473	1942	242	1044	297	1096	301	1278	770	3038	543	2322	
09:00	447		224	267		304		714		528			
09:15	443		226	281		317		724		543			
09:30	494		201	277		271		771		472			
09:45	454	1838	223	874	301	1126	275	1167	755	2964	498	2041	
10:00	380		183	305		253		685		436			
10:15	411		177	322		225		733		402			
10:30	397		157	325		242		722		399			
10:45	394	1582	161	678	333	1285	241	961	727	2867	402	1639	
11:00	431		137	317		244		748		381			
11:15	395		125	356		199		751		324			
11:30	402		83	333		207		735		290			
11:45	341	1569	81	426	335	1341	175	825	676	2910	256	1251	
Total	14247		15025		9083		17546		23330		32571		
Percent	61.1%		46.1%		38.9%		53.9%						
Day Total			29272				26629				55901		
Peak	05:45	-	02:45	-	11:00	-	03:00	-	08:00	-	02:45	-	
Vol.	2053	-	1746	-	1341	-	1866	-	3038	-	3582	-	
P.H.F.	0.958		0.951		0.942		0.968		0.980		0.974		



PRECISION  
D A T A  
INDUSTRIES, LLC

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Route 1A  
north of Tomasello Drive  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 B Volume  
Site Code: 13796.00

Start	SB				NB				Combin ed		5/9/2017		
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		Tue
12:00	95		409		112		285		207		694		
12:15	78		414		111		359		189		773		
12:30	66		368		122		361		188		729		
12:45	54	293	403	1594	112	457	320	1325	166	750	723	2919	
01:00	59		390		91		270		150		660		
01:15	50		396		88		333		138		729		
01:30	53		404		86		409		139		813		
01:45	50	212	395	1585	60	325	390	1402	110	537	785	2987	
02:00	38		473		70		376		108		849		
02:15	31		470		38		411		69		881		
02:30	51		411		57		455		108		866		
02:45	49	169	412	1766	51	216	445	1687	100	385	857	3453	
03:00	52		398		47		446		99		844		
03:15	72		462		32		503		104		965		
03:30	83		443		48		459		131		902		
03:45	105	312	441	1744	61	188	461	1869	166	500	902	3613	
04:00	112		380		61		490		173		870		
04:15	154		416		77		473		231		889		
04:30	201		417		80		438		281		855		
04:45	237	704	416	1629	106	324	485	1886	343	1028	901	3515	
05:00	270		423		135		486		405		909		
05:15	326		365		148		477		474		842		
05:30	461		412		147		495		608		907		
05:45	499	1556	378	1578	201	631	480	1938	700	2187	858	3516	
06:00	553		376		220		463		773		839		
06:15	502		336		202		479		704		815		
06:30	486		384		223		450		709		834		
06:45	483	2024	316	1412	276	921	494	1886	759	2945	810	3298	
07:00	434		315		267		459		701		774		
07:15	477		318		295		452		772		770		
07:30	472		294		243		371		715		665		
07:45	495	1878	281	1208	271	1076	316	1598	766	2954	597	2806	
08:00	500		263		309		333		809		596		
08:15	510		247		276		325		786		572		
08:30	484		236		279		340		763		576		
08:45	505	1999	231	977	254	1118	318	1316	759	3117	549	2293	
09:00	441		207		281		336		722		543		
09:15	463		256		295		342		758		598		
09:30	482		233		330		304		812		537		
09:45	431	1817	186	882	266	1172	300	1282	697	2989	486	2164	
10:00	401		210		325		269		726		479		
10:15	442		190		325		289		767		479		
10:30	437		175		337		298		774		473		
10:45	423	1703	190	765	311	1298	288	1144	734	3001	478	1909	
11:00	404		138		329		296		733		434		
11:15	418		120		327		233		745		353		
11:30	406		128		340		200		746		328		
11:45	374	1602	99	485	343	1339	172	901	717	2941	271	1386	
Total	14269		15625		9065		18234		23334		33859		
Percent	61.2%		46.1%		38.8%		53.9%						
Day Total			29894				27299				57193		
Peak	05:45	-	02:00	-	11:00	-	04:45	-	07:45	-	03:15	-	-
Vol.	2040	-	1766	-	1339	-	1943	-	3124	-	3639	-	-
P.H.F.	0.922		0.933		0.976		0.981		0.965		0.943		



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	312	17	8	0	0	0	0	0	0	0	0	0	0	337
01:00	174	10	8	0	0	0	0	0	0	0	0	0	0	192
02:00	167	17	13	0	0	0	0	0	0	0	0	0	0	197
03:00	253	34	24	0	0	0	0	0	0	0	0	0	0	311
04:00	615	42	24	0	0	0	0	0	0	0	0	0	0	681
05:00	1448	93	31	0	0	0	0	0	0	0	0	0	0	1572
06:00	1850	112	22	0	0	0	0	0	0	0	0	0	0	1984
07:00	1726	78	18	0	0	0	0	0	0	0	0	0	0	1822
08:00	1801	102	25	0	0	0	0	0	0	0	0	0	0	1928
09:00	1805	109	21	0	0	0	0	0	0	0	0	0	0	1935
10:00	1751	96	21	0	0	0	0	0	0	0	0	0	0	1868
11:00	1577	84	29	0	0	0	0	0	0	0	0	0	0	1690
12 PM	1434	105	34	0	0	0	0	0	0	0	0	0	0	1573
13:00	1624	87	30	0	0	0	0	0	0	0	0	0	0	1741
14:00	1669	90	25	0	0	0	0	0	0	0	0	0	0	1784
15:00	1700	89	10	0	0	0	0	0	0	0	0	0	0	1799
16:00	1554	47	13	0	0	0	0	0	0	0	0	0	0	1614
17:00	1533	49	9	0	0	0	0	0	0	0	0	0	0	1591
18:00	1354	39	12	0	0	0	0	0	0	0	0	0	0	1405
19:00	1195	37	11	0	0	0	0	0	0	0	0	0	0	1243
20:00	1121	28	14	0	0	0	0	0	0	0	0	0	0	1163
21:00	890	30	9	0	0	0	0	0	0	0	0	0	0	929
22:00	750	21	10	0	0	0	0	0	0	0	0	0	0	781
23:00	490	11	5	0	0	0	0	0	0	0	0	0	0	506
Total	28793	1427	426	0	0	0	0	0	0	0	0	0	0	30646
Percent	94.0%	4.7%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	06:00	05:00											06:00
Vol.	1850	112	31											1984
PM Peak	15:00	12:00	12:00											15:00
Vol.	1700	105	34											1799



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/17														
7:00	307	12	2	0	0	0	0	0	0	0	0	0	0	321
01:00	176	8	7	0	0	0	0	0	0	0	0	0	0	191
02:00	183	18	9	0	0	0	0	0	0	0	0	0	0	210
03:00	288	22	19	0	0	0	0	0	0	0	0	0	0	329
04:00	659	49	20	0	0	0	0	0	0	0	0	0	0	728
05:00	1469	92	10	0	0	0	0	0	0	0	0	0	0	1571
06:00	1822	98	18	0	0	0	0	0	0	0	0	0	0	1938
07:00	1769	90	21	0	0	0	0	0	0	0	0	0	0	1880
08:00	1816	54	19	0	0	0	0	0	0	0	0	0	0	1889
09:00	1811	106	22	0	0	0	0	0	0	0	0	0	0	1939
10:00	1735	69	30	0	0	0	0	0	0	0	0	0	0	1834
11:00	1474	97	20	0	0	0	0	0	0	0	0	0	0	1591
12 PM	1571	81	19	0	0	0	0	0	0	0	0	0	0	1671
13:00	1616	92	24	0	0	0	0	0	0	0	0	0	0	1732
14:00	1735	91	21	0	0	0	0	0	0	0	0	0	0	1847
15:00	1679	61	9	0	0	0	0	0	0	0	0	0	0	1749
16:00	1625	62	6	0	0	0	0	0	0	0	0	0	0	1693
17:00	1586	55	13	0	0	0	0	0	0	0	0	0	0	1654
18:00	1399	59	9	0	0	0	0	0	0	0	0	0	0	1467
19:00	1231	29	13	0	0	0	0	0	0	0	0	0	0	1273
20:00	1113	21	12	0	0	0	0	0	0	0	0	0	0	1146
21:00	961	19	6	0	0	0	0	0	0	0	0	0	0	986
22:00	801	20	8	0	0	0	0	0	0	0	0	0	0	829
23:00	516	18	8	0	0	0	0	0	0	0	0	0	0	542
Total	29342	1323	345	0	0	0	0	0	0	0	0	0	0	31010
Percent	94.6%	4.3%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	09:00	10:00											09:00
Vol.	1822	106	30											1939
PM Peak	14:00	13:00	13:00											14:00
Vol.	1735	92	24											1847





Page 3

175607 C Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/1														
7	322	11	5	0	0	0	0	0	0	0	0	0	0	338
01:00	342	18	6	0	0	0	0	0	0	0	0	0	0	366
02:00	206	9	4	0	0	0	0	0	0	0	0	0	0	219
03:00	301	24	10	0	0	0	0	0	0	0	0	0	0	335
04:00	652	37	17	0	0	0	0	0	0	0	0	0	0	706
05:00	1382	65	23	0	0	0	0	0	0	0	0	0	0	1470
06:00	1840	119	31	0	0	0	0	0	0	0	0	0	0	1990
07:00	1718	89	18	0	0	0	0	0	0	0	0	0	0	1825
08:00	1783	89	24	0	0	0	0	0	0	0	0	0	0	1896
09:00	1551	77	25	0	0	0	0	0	0	0	0	0	0	1653
10:00	1543	74	29	0	0	0	0	0	0	0	0	0	0	1646
11:00	1562	100	23	0	0	0	0	0	0	0	0	0	0	1685
12 PM	1661	91	28	0	0	0	0	0	0	0	0	0	0	1780
13:00	1730	108	21	0	0	0	0	0	0	0	0	0	0	1859
14:00	1824	80	15	0	0	0	0	0	0	0	0	0	0	1919
15:00	1606	77	24	0	0	0	0	0	0	0	0	0	0	1707
16:00	1574	58	17	0	0	0	0	0	0	0	0	0	0	1649
17:00	1661	38	6	0	0	0	0	0	0	0	0	0	0	1705
18:00	1585	65	13	0	0	0	0	0	0	0	0	0	0	1663
19:00	1441	41	10	0	0	0	0	0	0	0	0	0	0	1492
20:00	1047	30	15	0	0	0	0	0	0	0	0	0	0	1092
21:00	970	24	6	0	0	0	0	0	0	0	0	0	0	1000
22:00	897	16	8	0	0	0	0	0	0	0	0	0	0	921
23:00	638	18	5	0	0	0	0	0	0	0	0	0	0	661
Total	29836	1358	383	0	0	0	0	0	0	0	0	0	0	31577
Percent	94.5%	4.3%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	06:00	06:00											06:00
Vol.	1840	119	31											1990
PM Peak	14:00	13:00	12:00											14:00
Vol.	1824	108	28											1919



Page 4

175607 C Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	468	10	3	0	0	0	0	0	0	0	0	0	0	481
01:00	344	12	2	0	0	0	0	0	0	0	0	0	0	358
02:00	295	13	3	0	0	0	0	0	0	0	0	0	0	311
03:00	319	18	13	0	0	0	0	0	0	0	0	0	0	350
04:00	472	32	12	0	0	0	0	0	0	0	0	0	0	516
05:00	714	31	10	0	0	0	0	0	0	0	0	0	0	755
06:00	1017	37	8	0	0	0	0	0	0	0	0	0	0	1062
07:00	1024	46	10	0	0	0	0	0	0	0	0	0	0	1080
08:00	1150	58	5	0	0	0	0	0	0	0	0	0	0	1213
09:00	1372	42	14	0	0	0	0	0	0	0	0	0	0	1428
10:00	1628	41	6	0	0	0	0	0	0	0	0	0	0	1675
11:00	1696	36	8	0	0	1696	0	0	0	0	0	0	0	1740
12 PM	1735	29	7	0	0	0	0	0	0	0	0	0	0	1771
13:00	1813	32	10	0	0	0	0	0	0	0	0	0	0	1855
14:00	1968	39	6	0	0	0	0	0	0	0	0	0	0	2013
15:00	1978	26	7	0	0	1978	0	0	0	0	0	0	0	2011
16:00	1807	26	5	0	0	0	0	0	0	0	0	0	0	1838
17:00	1745	23	4	0	0	0	0	0	0	0	0	0	0	1772
18:00	1713	19	6	0	0	0	0	0	0	0	0	0	0	1738
19:00	1569	17	5	0	0	0	0	0	0	0	0	0	0	1591
20:00	1223	17	6	0	0	0	0	0	0	0	0	0	0	1246
21:00	1164	23	8	0	0	0	0	0	0	0	0	0	0	1195
22:00	972	16	3	0	0	0	0	0	0	0	0	0	0	991
23:00	745	17	2	0	0	0	0	0	0	0	0	0	0	764
Total	28931	660	163	0	0	0	0	0	0	0	0	0	0	29754
Percent	97.2%	2.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	09:00											11:00
Vol.	1696	58	14											1740
PM Peak	15:00	14:00	13:00											14:00
Vol.	1978	39	10											2013



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175607 C Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/17														
7:00	543	8	2	0	0	0	0	0	0	0	0	0	0	553
01:00	476	11	5	0	0	0	0	0	0	0	0	0	0	492
02:00	326	6	3	0	0	0	0	0	0	0	0	0	0	335
03:00	281	13	4	0	0	0	0	0	0	0	0	0	0	298
04:00	445	21	3	0	0	0	0	0	0	0	0	0	0	469
05:00	583	22	8	0	0	0	0	0	0	0	0	0	0	613
06:00	792	26	7	0	0	0	0	0	0	0	0	0	0	825
07:00	881	23	7	0	0	0	0	0	0	0	0	0	0	911
08:00	983	23	7	0	0	0	0	0	0	0	0	0	0	1013
09:00	1335	22	4	0	0	0	0	0	0	0	0	0	0	1361
10:00	1413	23	7	0	0	0	0	0	0	0	0	0	0	1443
11:00	1539	29	6	0	0	0	0	0	0	0	0	0	0	1574
12 PM	1748	23	1	0	0	0	0	0	0	0	0	0	0	1772
13:00	1715	19	4	0	0	0	0	0	0	0	0	0	0	1738
14:00	1760	22	4	0	0	0	0	0	0	0	0	0	0	1786
15:00	1635	24	8	0	0	0	0	0	0	0	0	0	0	1667
16:00	1752	23	5	0	0	0	0	0	0	0	0	0	0	1780
17:00	1550	17	4	0	0	0	0	0	0	0	0	0	0	1571
18:00	1525	19	6	0	0	0	0	0	0	0	0	0	0	1550
19:00	1294	15	6	0	0	0	0	0	0	0	0	0	0	1315
20:00	1126	16	7	0	0	0	0	0	0	0	0	0	0	1149
21:00	984	17	4	0	0	0	0	0	0	0	0	0	0	1005
22:00	734	16	5	0	0	0	0	0	0	0	0	0	0	755
23:00	473	17	9	0	0	0	0	0	0	0	0	0	0	499
Total	25893	455	126	0	0	0	0	0	0	0	0	0	0	26474
Percent	97.8%	1.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	05:00											11:00
Vol.	1539	29	8											1574
PM Peak	14:00	15:00	23:00											14:00
Vol.	1760	24	9											1786



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	350	12	9	0	0	0	0	0	0	0	0	0	0	371
01:00	301	10	3	0	0	0	0	0	0	0	0	0	0	314
02:00	148	8	4	0	0	0	0	0	0	0	0	0	0	160
03:00	269	26	8	0	0	0	0	0	0	0	0	0	0	303
04:00	686	35	17	0	0	0	0	0	0	0	0	0	0	738
05:00	1489	67	24	0	0	0	0	0	0	0	0	0	0	1580
06:00	1897	108	16	0	0	0	0	0	0	0	0	0	0	2021
07:00	1739	82	14	0	0	0	0	0	0	0	0	0	0	1835
08:00	1801	66	8	0	0	0	0	0	0	0	0	0	0	1875
09:00	1711	85	28	0	0	0	0	0	0	0	0	0	0	1824
10:00	1477	90	21	0	0	0	0	0	0	0	0	0	0	1588
11:00	1463	91	24	0	0	0	0	0	0	0	0	0	0	1578
12 PM	1498	103	29	0	0	0	0	0	0	0	0	0	0	1630
13:00	1521	85	22	0	0	0	0	0	0	0	0	0	0	1628
14:00	1586	66	22	0	0	0	0	0	0	0	0	0	0	1674
15:00	1623	70	17	0	0	0	0	0	0	0	0	0	0	1710
16:00	1457	66	6	0	0	0	0	0	0	0	0	0	0	1529
17:00	1360	51	4	0	0	0	0	0	0	0	0	0	0	1415
18:00	1198	34	11	0	0	0	0	0	0	0	0	0	0	1243
19:00	1116	27	9	0	0	0	0	0	0	0	0	0	0	1152
20:00	999	28	21	0	0	0	0	0	0	0	0	0	0	1048
21:00	853	22	8	0	0	0	0	0	0	0	0	0	0	883
22:00	663	24	2	0	0	0	0	0	0	0	0	0	0	689
23:00	410	9	4	0	0	0	0	0	0	0	0	0	0	423
Total	27615	1265	331	0	0	0	0	0	0	0	0	0	0	29211
Percent	94.5%	4.3%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	06:00	09:00											06:00
Vol.	1897	108	28											2021
PM Peak	15:00	12:00	12:00											15:00
Vol.	1623	103	29											1710



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/1														
7	278	12	4	0	0	0	0	0	0	0	0	0	0	294
01:00	185	13	7	0	0	0	0	0	0	0	0	0	0	205
02:00	142	15	12	0	0	0	0	0	0	0	0	0	0	169
03:00	264	34	15	0	0	0	0	0	0	0	0	0	0	313
04:00	636	50	18	0	0	0	0	0	0	0	0	0	0	704
05:00	1434	81	37	0	0	0	0	0	0	0	0	0	0	1552
06:00	1877	118	21	0	0	0	0	0	0	0	0	0	0	2016
07:00	1756	90	15	0	0	0	0	0	0	0	0	0	0	1861
08:00	1859	74	21	0	0	0	0	0	0	0	0	0	0	1954
09:00	1672	91	42	0	0	0	0	0	0	0	0	0	0	1805
10:00	1559	92	27	0	0	0	0	0	0	0	0	0	0	1678
11:00	1445	109	36	0	0	0	0	0	0	0	0	0	0	1590
12 PM	1465	111	37	0	0	0	0	0	0	0	0	0	0	1613
13:00	1464	93	19	0	0	0	0	0	0	0	0	0	0	1576
14:00	1653	81	21	0	0	0	0	0	0	0	0	0	0	1755
15:00	1655	74	8	0	0	0	0	0	0	0	0	0	0	1737
16:00	1569	56	14	0	0	0	0	0	0	0	0	0	0	1639
17:00	1503	67	11	0	0	0	0	0	0	0	0	0	0	1581
18:00	1331	40	10	0	0	0	0	0	0	0	0	0	0	1381
19:00	1154	35	13	0	0	0	0	0	0	0	0	0	0	1202
20:00	932	29	13	0	0	0	0	0	0	0	0	0	0	974
21:00	844	25	13	0	0	0	0	0	0	0	0	0	0	882
22:00	740	17	1	0	0	0	0	0	0	0	0	0	0	758
23:00	460	18	7	0	0	0	0	0	0	0	0	0	0	485
Total	27877	1425	422	0	0	0	0	0	0	0	0	0	0	29724
Percent	93.8%	4.8%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	06:00	09:00											06:00
Vol.	1877	118	42											2016
PM Peak	15:00	12:00	12:00											14:00
Vol.	1655	111	37											1755



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	630	13	8	0	0	0	0	0	0	0	0	0	0	651
01:00	315	10	9	0	0	0	0	0	0	0	0	0	0	334
02:00	213	14	7	0	0	0	0	0	0	0	0	0	0	234
03:00	185	11	15	0	0	0	0	0	0	0	0	0	0	211
04:00	306	26	22	0	0	0	0	0	0	0	0	0	0	354
05:00	586	33	18	0	0	0	0	0	0	0	0	0	0	637
06:00	669	64	20	0	0	0	0	0	0	0	0	0	0	753
07:00	949	64	16	0	0	0	0	0	0	0	0	0	0	1029
08:00	847	82	26	0	0	0	0	0	0	0	0	0	0	955
09:00	1096	81	28	0	0	0	0	0	0	0	0	0	0	1205
10:00	1237	88	40	0	0	0	0	0	0	0	0	0	0	1365
11:00	1390	115	46	0	0	0	0	0	0	0	0	0	0	1551
12 PM	1547	92	18	0	0	0	0	0	0	0	0	0	0	1657
13:00	1420	89	13	0	0	0	0	0	0	0	0	0	0	1522
14:00	1621	76	17	0	0	0	0	0	0	0	0	0	0	1714
15:00	1632	93	19	0	0	0	0	0	0	0	0	0	0	1744
16:00	1708	70	15	0	0	0	0	0	0	0	0	0	0	1793
17:00	1757	58	16	0	0	0	0	0	0	0	0	0	0	1831
18:00	1768	64	16	0	0	0	0	0	0	0	0	0	0	1848
19:00	1669	39	9	0	0	0	0	0	0	0	0	0	0	1717
20:00	1390	34	7	0	0	0	0	0	0	0	0	0	0	1431
21:00	1256	28	15	0	0	0	0	0	0	0	0	0	0	1299
22:00	1077	19	12	0	0	0	0	0	0	0	0	0	0	1108
23:00	1012	21	6	0	0	0	0	0	0	0	0	0	0	1039
Total	26280	1284	418	0	0	0	0	0	0	0	0	0	0	27982
Percent	93.9%	4.6%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	11:00											11:00
Vol.	1390	115	46											1551
PM Peak	18:00	15:00	15:00											18:00
Vol.	1768	93	19											1848



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[illegible]



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	644	19	9	0	0	0	0	0	0	0	0	0	0	672
01:00	384	8	7	0	0	0	0	0	0	0	0	0	0	399
02:00	244	8	10	0	0	0	0	0	0	0	0	0	0	262
03:00	196	17	23	0	0	0	0	0	0	0	0	0	0	236
04:00	356	28	21	0	0	0	0	0	0	0	0	0	0	405
05:00	572	54	22	0	0	0	0	0	0	0	0	0	0	648
06:00	764	40	18	0	0	0	0	0	0	0	0	0	0	822
07:00	1103	75	23	0	0	0	0	0	0	0	0	0	0	1201
08:00	1100	105	20	0	0	0	0	0	0	0	0	0	0	1225
09:00	1180	83	28	0	0	0	0	0	0	0	0	0	0	1291
10:00	1233	82	32	0	0	0	0	0	0	0	0	0	0	1347
11:00	1409	94	41	0	0	0	0	0	0	0	0	0	0	1544
12 PM	1477	103	26	0	0	0	0	0	0	0	0	0	0	1606
13:00	1389	77	21	0	0	0	0	0	0	0	0	0	0	1487
14:00	1660	79	30	0	0	0	0	0	0	0	0	0	0	1769
15:00	1662	61	16	0	0	0	0	0	0	0	0	0	0	1739
16:00	1730	41	12	0	0	0	0	0	0	0	0	0	0	1783
17:00	1603	59	6	0	0	0	0	0	0	0	0	0	0	1668
18:00	1686	55	6	0	0	0	0	0	0	0	0	0	0	1747
19:00	1528	41	13	0	0	0	0	0	0	0	0	0	0	1582
20:00	1318	24	7	0	0	0	0	0	0	0	0	0	0	1349
21:00	1269	44	22	0	0	0	0	0	0	0	0	0	0	1335
22:00	1299	25	12	0	0	0	0	0	0	0	0	0	0	1336
23:00	1149	22	8	0	0	0	0	0	0	0	0	0	0	1179
Total	26955	1244	433	0	0	0	0	0	0	0	0	0	0	28632
Percent	94.1%	4.3%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	11:00											11:00
Vol.	1409	105	41											1544
PM Peak	16:00	12:00	14:00											16:00
Vol.	1730	103	30											1783





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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	819	16	3	0	0	0	0	0	0	0	0	0	0	838
01:00	618	12	2	0	0	0	0	0	0	0	0	0	0	632
02:00	486	11	4	0	0	0	0	0	0	0	0	0	0	501
03:00	342	12	9	0	0	0	0	0	0	0	0	0	0	363
04:00	415	17	13	0	0	0	0	0	0	0	0	0	0	445
05:00	478	25	13	0	0	0	0	0	0	0	0	0	0	516
06:00	660	27	16	0	0	0	0	0	0	0	0	0	0	703
07:00	940	25	9	0	0	0	0	0	0	0	0	0	0	974
08:00	999	47	12	0	0	0	0	0	0	0	0	0	0	1058
09:00	1186	50	13	0	0	0	0	0	0	0	0	0	0	1249
10:00	1336	40	16	0	0	0	0	0	0	0	0	0	0	1392
11:00	1618	41	15	0	0	0	0	0	0	0	0	0	0	1674
12 PM	1786	33	4	0	0	0	0	0	0	0	0	0	0	1823
13:00	1858	37	9	0	0	0	0	0	0	0	0	0	0	1904
14:00	1923	35	15	0	0	0	0	0	0	0	0	0	0	1973
15:00	1887	31	6	0	0	0	0	0	0	0	0	0	0	1924
16:00	2093	25	7	0	0	0	0	0	0	0	0	0	0	2125
17:00	1751	32	5	0	0	0	0	0	0	0	0	0	0	1788
18:00	1588	25	4	0	0	0	0	0	0	0	0	0	0	1617
19:00	1536	26	3	0	0	0	0	0	0	0	0	0	0	1565
20:00	1279	14	3	0	0	0	0	0	0	0	0	0	0	1296
21:00	1341	17	1	0	0	0	0	0	0	0	0	0	0	1359
22:00	1239	27	5	0	0	0	0	0	0	0	0	0	0	1271
23:00	1089	21	6	0	0	0	0	0	0	0	0	0	0	1116
Total	29267	646	193	0	0	0	0	0	0	0	0	0	0	30106
Percent	97.2%	2.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	06:00											11:00
Vol.	1618	50	16											1674
PM Peak	16:00	13:00	14:00											16:00
Vol.	2093	37	15											2125



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/1														
7	708	12	2	0	0	0	0	0	0	0	0	0	0	722
01:00	650	19	2	0	0	0	0	0	0	0	0	0	0	671
02:00	428	11	4	0	0	0	0	0	0	0	0	0	0	443
03:00	337	7	8	0	0	0	0	0	0	0	0	0	0	352
04:00	376	11	6	0	0	0	0	0	0	0	0	0	0	393
05:00	476	23	5	0	0	0	0	0	0	0	0	0	0	504
06:00	515	20	6	0	0	0	0	0	0	0	0	0	0	541
07:00	681	19	6	0	0	0	0	0	0	0	0	0	0	706
08:00	810	22	8	0	0	0	0	0	0	0	0	0	0	840
09:00	1076	18	5	0	0	0	0	0	0	0	0	0	0	1099
10:00	1240	16	7	0	0	0	0	0	0	0	0	0	0	1263
11:00	1348	26	6	0	0	0	0	0	0	0	0	0	0	1380
12 PM	1646	26	5	0	0	0	0	0	0	0	0	0	0	1677
13:00	1799	17	9	0	0	0	0	0	0	0	0	0	0	1825
14:00	1819	29	7	0	0	0	0	0	0	0	0	0	0	1855
15:00	1718	30	6	0	0	0	0	0	0	0	0	0	0	1754
16:00	1601	20	6	0	0	0	0	0	0	0	0	0	0	1627
17:00	1710	20	5	0	0	0	0	0	0	0	0	0	0	1735
18:00	1584	11	4	0	0	0	0	0	0	0	0	0	0	1599
19:00	1476	11	3	0	0	0	0	0	0	0	0	0	0	1490
20:00	1327	19	10	0	0	0	0	0	0	0	0	0	0	1356
21:00	1098	16	8	0	0	0	0	0	0	0	0	0	0	1122
22:00	993	22	5	0	0	0	0	0	0	0	0	0	0	1020
23:00	776	11	7	0	0	0	0	0	0	0	0	0	0	794
Total	26192	436	140	0	0	0	0	0	0	0	0	0	0	26768
Percent	97.8%	1.6%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	03:00											11:00
Vol.	1348	26	8											1380
PM Peak	14:00	15:00	20:00											14:00
Vol.	1819	30	10											1855



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	476	14	6	0	0	0	0	0	0	0	0	0	0	496
01:00	298	7	6	0	0	0	0	0	0	0	0	0	0	311
02:00	204	4	3	0	0	0	0	0	0	0	0	0	0	211
03:00	153	9	8	0	0	0	0	0	0	0	0	0	0	170
04:00	292	18	12	0	0	0	0	0	0	0	0	0	0	322
05:00	555	45	10	0	0	0	0	0	0	0	0	0	0	610
06:00	812	42	23	0	0	0	0	0	0	0	0	0	0	877
07:00	1010	60	20	0	0	0	0	0	0	0	0	0	0	1090
08:00	960	83	17	0	0	0	0	0	0	0	0	0	0	1060
09:00	1029	68	33	0	0	0	0	0	0	0	0	0	0	1130
10:00	1138	122	36	0	0	0	0	0	0	0	0	0	0	1296
11:00	1228	116	29	0	0	0	0	0	0	0	0	0	0	1373
12 PM	1326	65	30	0	0	0	0	0	0	0	0	0	0	1421
13:00	1414	97	25	0	0	0	0	0	0	0	0	0	0	1536
14:00	1590	57	19	0	0	0	0	0	0	0	0	0	0	1666
15:00	1768	60	19	0	0	0	0	0	0	0	0	0	0	1847
16:00	1689	82	28	0	0	0	0	0	0	0	0	0	0	1799
17:00	1733	54	20	0	0	0	0	0	0	0	0	0	0	1807
18:00	1757	60	15	0	0	0	0	0	0	0	0	0	0	1832
19:00	1348	42	6	0	0	0	0	0	0	0	0	0	0	1396
20:00	1230	16	3	0	0	0	0	0	0	0	0	0	0	1249
21:00	1040	31	12	0	0	0	0	0	0	0	0	0	0	1083
22:00	904	29	16	0	0	0	0	0	0	0	0	0	0	949
23:00	780	16	7	0	0	0	0	0	0	0	0	0	0	803
Total	24734	1197	403	0	0	0	0	0	0	0	0	0	0	26334
Percent	93.9%	4.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	10:00											11:00
Vol.	1228	122	36											1373
PM Peak	15:00	13:00	12:00											15:00
Vol.	1768	97	30											1847



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/17														
7:00	422	10	8	0	0	0	0	0	0	0	0	0	0	440
01:00	286	16	8	0	0	0	0	0	0	0	0	0	0	310
02:00	194	10	5	0	0	0	0	0	0	0	0	0	0	209
03:00	156	10	16	0	0	0	0	0	0	0	0	0	0	182
04:00	273	28	24	0	0	0	0	0	0	0	0	0	0	325
05:00	517	51	21	0	0	0	0	0	0	0	0	0	0	589
06:00	803	59	23	0	0	0	0	0	0	0	0	0	0	885
07:00	947	64	24	0	0	0	0	0	0	0	0	0	0	1035
08:00	987	68	25	0	0	0	0	0	0	0	0	0	0	1080
09:00	1063	86	37	0	0	0	0	0	0	0	0	0	0	1186
10:00	1171	112	44	0	0	0	0	0	0	0	0	0	0	1327
11:00	1220	90	34	0	0	0	0	0	0	0	0	0	0	1344
12 PM	1229	75	18	0	0	0	0	0	0	0	0	0	0	1322
13:00	1274	90	33	0	0	0	0	0	0	0	0	0	0	1397
14:00	1608	72	27	0	0	0	0	0	0	0	0	0	0	1707
15:00	1787	82	15	0	0	0	0	0	0	0	0	0	0	1884
16:00	1795	87	18	0	0	0	0	0	0	0	0	0	0	1900
17:00	1854	63	13	0	0	0	0	0	0	0	0	0	0	1930
18:00	1844	54	15	0	0	0	0	0	0	0	0	0	0	1913
19:00	1530	40	8	0	0	0	0	0	0	0	0	0	0	1578
20:00	1265	35	10	0	0	0	0	0	0	0	0	0	0	1310
21:00	1177	37	13	0	0	0	0	0	0	0	0	0	0	1227
22:00	1011	24	11	0	0	0	0	0	0	0	0	0	0	1046
23:00	845	23	6	0	0	0	0	0	0	0	0	0	0	874
Total	25258	1286	456	0	0	0	0	0	0	0	0	0	0	27000
Percent	93.5%	4.8%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	10:00											11:00
Vol.	1220	112	44											1344
PM Peak	17:00	13:00	13:00											17:00
Vol.	1854	90	33											1930



PRECISION  
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INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
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Email: datarequests@pdillc.com

Route 1A  
between Jug Handle Entrance and Exit  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 C Volume  
Site Code: 13796.00

Start Time	5/3/2017		5/4/2017		5/5/2017		5/6/2017		5/7/2017		5/8/2017		5/9/2017		Week Average	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	337	651	321	573	338	672	481	838	553	722	371	496	294	440	385	627
01:00	192	334	191	333	366	399	358	632	492	671	314	311	205	310	303	427
02:00	197	234	210	259	219	262	311	501	335	443	160	211	169	209	229	303
03:00	311	211	329	212	335	236	350	363	298	352	303	170	313	182	320	247
04:00	681	354	728	362	706	405	516	445	469	393	738	322	704	325	649	372
05:00	1572	637	1571	631	1470	648	755	516	613	504	1580	610	1552	589	1302	591
06:00	1984	753	1938	897	1990	822	1062	703	825	541	2021	877	2016	885	1691	783
07:00	1822	1029	1880	1161	1825	1201	1080	974	911	706	1835	1090	1861	1035	1602	1028
08:00	1928	955	1889	1105	1896	1225	1213	1058	1013	840	1875	1060	1954	1080	1681	1046
09:00	1935	1205	1939	1203	1653	1291	1428	1249	1361	1099	1824	1130	1805	1186	1706	1195
10:00	1868	1365	1834	1422	1646	1347	1675	1392	1443	1263	1588	1296	1678	1327	1676	1345
11:00	1690	1551	1591	1570	1685	1544	1740	1674	1574	1380	1578	1373	1590	1344	1635	1491
12:00 PM	1573	1657	1671	1683	1780	1606	1771	1823	1772	1677	1630	1421	1613	1322	1687	1598
01:00	1741	1522	1732	1680	1859	1487	1855	1904	1738	1825	1628	1536	1576	1397	1733	1622
02:00	1784	1714	1847	1842	1919	1769	2013	1973	1786	1855	1674	1666	1755	1707	1825	1789
03:00	1799	1744	1749	1968	1707	1739	2011	1924	1667	1754	1710	1847	1737	1884	1769	1837
04:00	1614	1793	1693	1843	1649	1783	1838	2125	1780	1627	1529	1799	1639	1900	1677	1839
05:00	1591	1831	1654	1935	1705	1668	1772	1788	1571	1735	1415	1807	1581	1930	1613	1813
06:00	1405	1848	1467	1944	1663	1747	1738	1617	1550	1599	1243	1832	1381	1913	1492	1786
07:00	1243	1717	1273	1792	1492	1582	1591	1565	1315	1490	1152	1396	1202	1578	1324	1589
08:00	1163	1431	1146	1475	1092	1349	1246	1296	1149	1356	1048	1249	974	1310	1117	1352
09:00	929	1299	986	1204	1000	1335	1195	1359	1005	1122	883	1083	882	1227	983	1233
10:00	781	1108	829	1198	921	1336	991	1271	755	1020	689	949	758	1046	818	1133
11:00	506	1039	542	1169	661	1179	764	1116	499	794	423	803	485	874	554	996
Total Day	30646	27982	31010	29461	31577	28632	29754	30106	26474	26768	29211	26334	29724	27000	29771	28042
	58628		60471		60209		59860		53242		55545		56724		57813	
AM Peak	06:00	11:00	09:00	11:00	06:00	11:00	11:00	11:00	11:00	11:00	06:00	11:00	06:00	11:00	09:00	11:00
Vol.	1984	1551	1939	1570	1990	1544	1740	1674	1574	1380	2021	1373	2016	1344	1706	1491
PM Peak	15:00	18:00	14:00	15:00	14:00	16:00	14:00	16:00	14:00	14:00	15:00	15:00	14:00	17:00	14:00	16:00
Vol.	1799	1848	1847	1968	1919	1783	2013	2125	1786	1855	1710	1847	1755	1930	1825	1839

Comb. Total	58628	60471	60209	59860	53242	55545	56724	57813
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ADT	ADT 57,811	AADT 57,811
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PRECISION  
D A T A  
INDUSTRIES, LLC

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Route 1A  
between Jug Handle Entrance and Exit  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 C Volume  
Site Code: 13796.00

Start	SB				NB				Combin ed		5/3/2017		
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		Wed
12:00	99		364		193		426		292		790		
12:15	91		386		174		409		265		795		
12:30	89		421		139		405		228		826		
12:45	58	337	402	1573	145	651	417	1657	203	988	819	3230	
01:00	64		426		103		389		167		815		
01:15	39		420		99		384		138		804		
01:30	49		471		69		384		118		855		
01:45	40	192	424	1741	63	334	365	1522	103	526	789	3263	
02:00	43		433		60		402		103		835		
02:15	45		453		61		450		106		903		
02:30	49		444		58		450		107		894		
02:45	60	197	454	1784	55	234	412	1714	115	431	866	3498	
03:00	56		464		48		447		104		911		
03:15	61		457		46		445		107		902		
03:30	87		449		49		424		136		873		
03:45	107	311	429	1799	68	211	428	1744	175	522	857	3543	
04:00	111		423		72		427		183		850		
04:15	149		406		88		477		237		883		
04:30	194		385		88		445		282		830		
04:45	227	681	400	1614	106	354	444	1793	333	1035	844	3407	
05:00	283		424		136		448		419		872		
05:15	355		387		145		462		500		849		
05:30	446		406		164		476		610		882		
05:45	488	1572	374	1591	192	637	445	1831	680	2209	819	3422	
06:00	505		374		181		454		686		828		
06:15	504		365		176		436		680		801		
06:30	518		364		172		461		690		825		
06:45	457	1984	302	1405	224	753	497	1848	681	2737	799	3253	
07:00	450		333		209		418		659		751		
07:15	478		285		297		474		775		759		
07:30	437		313		276		447		713		760		
07:45	457	1822	312	1243	247	1029	378	1717	704	2851	690	2960	
08:00	481		308		223		369		704		677		
08:15	471		287		229		354		700		641		
08:30	468		294		221		366		689		660		
08:45	508	1928	274	1163	282	955	342	1431	790	2883	616	2594	
09:00	487		267		265		313		752		580		
09:15	496		249		308		356		804		605		
09:30	463		203		318		300		781		503		
09:45	489	1935	210	929	314	1205	330	1299	803	3140	540	2228	
10:00	448		204		316		294		764		498		
10:15	479		190		327		272		806		462		
10:30	484		186		368		271		852		457		
10:45	457	1868	201	781	354	1365	271	1108	811	3233	472	1889	
11:00	432		150		414		292		846		442		
11:15	415		126		382		285		797		411		
11:30	416		120		374		265		790		385		
11:45	427	1690	110	506	381	1551	197	1039	808	3241	307	1545	
Total	14517		16129		9279		18703		23796		34832		
Percent	61.0%		46.3%		39.0%		53.7%						
Day Total			30646				27982				58628		
Peak	05:45	-	02:45	-	11:00	-	06:30	-	10:15	-	02:15	-	-
Vol.	2015	-	1824	-	1551	-	1850	-	3315	-	3574	-	-
P.H.F.	0.972		0.983		0.937		0.931		0.973		0.981		



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Route 1A  
between Jug Handle Entrance and Exit  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 C Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/4/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Thu	
12:00	78	437	177	429	255	866		
12:15	84	436	145	427	229	863		
12:30	66	410	123	445	189	855		
12:45	93	388	128	382	221	770	3354	
01:00	54	456	107	403	161	859		
01:15	54	419	95	454	149	873		
01:30	44	392	77	389	121	781		
01:45	39	465	54	434	93	899	3412	
02:00	48	471	63	468	111	939		
02:15	47	399	75	463	122	862		
02:30	52	486	57	463	109	949		
02:45	63	491	64	448	127	939	3689	
03:00	46	459	44	484	90	943		
03:15	60	428	51	476	111	904		
03:30	98	455	51	499	149	954		
03:45	125	407	66	509	191	916	3717	
04:00	121	420	87	425	208	845		
04:15	177	407	81	479	258	886		
04:30	191	428	102	474	293	902		
04:45	239	438	92	465	331	903	3536	
05:00	267	431	151	523	418	954		
05:15	365	412	154	464	519	876		
05:30	456	414	156	479	612	893		
05:45	483	397	170	469	653	866	3589	
06:00	514	403	208	454	722	857		
06:15	486	361	233	488	719	849		
06:30	487	365	217	491	704	856		
06:45	451	338	239	511	690	849	3411	
07:00	433	303	264	492	697	795		
07:15	470	344	314	437	784	781		
07:30	479	337	297	444	776	781		
07:45	498	289	286	419	784	708	3065	
08:00	457	285	272	328	729	613		
08:15	490	297	288	375	778	672		
08:30	458	308	267	409	725	717		
08:45	484	256	278	363	762	619	2621	
09:00	485	279	297	290	782	569		
09:15	483	254	275	348	758	602		
09:30	482	228	311	285	793	513		
09:45	489	225	320	281	809	506	2190	
10:00	450	216	320	255	770	471		
10:15	468	208	327	329	795	537		
10:30	431	199	371	308	802	507		
10:45	485	206	404	306	889	512	2027	
11:00	366	160	402	359	768	519		
11:15	375	127	400	284	775	411		
11:30	450	150	392	290	842	440		
11:45	400	105	376	236	776	341	1711	
Total	14421	16589	9728	19733	24149	36322		
Percent	59.7%	45.7%	40.3%	54.3%				
Day Total	31010		29461		60471			
Peak	05:45	-	02:30	-	10:45	-	02:45	-
Vol.	1970	-	1864	-	1598	-	3740	-
P.H.F.	0.958	-	0.949	-	0.989	-	0.980	-



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Route 1A  
between Jug Handle Entrance and Exit  
City, State: Boston, MA  
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175607 C Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/5/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	110	441	183	418	293	859		
12:15	93	433	189	367	282	800		
12:30	56	450	154	402	210	852		
12:45	79	338 456	146 1780	672 419	1606 225	1010 875	3386	
01:00	74	452	83	353	157	805		
01:15	81	471	112	380	193	851		
01:30	120	470	107	383	227	853		
01:45	91	366 466	97 1859	399 371	1487 188	765 837	3346	
02:00	74	467	85	434	159	901		
02:15	54	493	53	457	107	950		
02:30	43	481	59	452	102	933		
02:45	48	219 478	1919 65	262 426	1769 113	481 904	3688	
03:00	59	438	52	424	111	862		
03:15	65	408	45	448	110	856		
03:30	100	450	58	427	158	877		
03:45	111	335 411	1707 81	236 440	1739 192	571 851	3446	
04:00	121	421	85	454	206	875		
04:15	158	440	77	434	235	874		
04:30	192	406	114	443	306	849		
04:45	235	706 382	1649 129	405 452	1783 364	1111 834	3432	
05:00	231	426	118	427	349	853		
05:15	368	394	151	427	519	821		
05:30	410	425	187	415	597	840		
05:45	461	1470 460	1705 192	648 399	1668 653	2118 859	3373	
06:00	524	441	217	410	741	851		
06:15	503	423	196	445	699	868		
06:30	479	407	212	441	691	848		
06:45	484	1990 392	1663 197	822 451	1747 681	2812 843	3410	
07:00	452	415	269	422	721	837		
07:15	451	396	305	420	756	816		
07:30	456	376	343	397	799	773		
07:45	466	1825 305	1492 284	1201 343	1582 750	3026 648	3074	
08:00	468	283	328	347	796	630		
08:15	509	303	275	360	784	663		
08:30	458	231	301	290	759	521		
08:45	461	1896 275	1092 321	1225 352	1349 782	3121 627	2441	
09:00	416	254	285	353	701	607		
09:15	404	265	346	329	750	594		
09:30	439	252	313	358	752	610		
09:45	394	1653 229	1000 347	1291 295	1335 741	2944 524	2335	
10:00	394	248	304	355	698	603		
10:15	400	255	335	352	735	607		
10:30	438	242	357	323	795	565		
10:45	414	1646 176	921 351	1347 306	1336 765	2993 482	2257	
11:00	394	201	415	296	809	497		
11:15	411	156	393	317	804	473		
11:30	419	154	364	320	783	474		
11:45	461	1685 150	661 372	1544 246	1179 833	3229 396	1840	
Total	14129	17448	10052	18580	24181	36028		
Percent	58.4%	48.4%	41.6%	51.6%				
Day Total		31577		28632		60209		
Peak	06:00	-	02:00	-	11:00	-	02:00	-
Vol.	1990	-	1919	-	1544	-	3688	-
P.H.F.	0.949		0.973		0.930		0.971	





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175607 C Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/6/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sat	
12:00	146	458	202	448	348	906		
12:15	131	412	237	447	368	859		
12:30	103	462	236	467	339	929		
12:45	101	439	163	838	461	1823	264	1319
01:00	98	437	171		486		269	900
01:15	98	472	138		457		236	923
01:30	65	484	160		476		225	929
01:45	97	462	163	632	485	1904	260	960
02:00	99	470	126		473		225	947
02:15	85	507	129		509		214	943
02:30	68	520	133		478		201	1016
02:45	59	516	113	501	513	1973	172	998
03:00	66	504	95		462		161	1029
03:15	69	517	100		498		169	966
03:30	100	500	69		444		169	1015
03:45	115	490	99	363	520	1924	214	944
04:00	94	431	83		472		177	1010
04:15	124	440	118		534		242	3935
04:30	151	489	101		588		252	903
04:45	147	478	143	445	531	2125	290	974
05:00	159	461	101		455		260	1009
05:15	179	392	130		409		309	916
05:30	204	463	133		455		337	801
05:45	213	456	152	516	469	1788	365	918
06:00	235	473	137		413		372	925
06:15	262	422	149		380		411	886
06:30	294	419	208		410		502	802
06:45	271	424	209	703	414	1617	480	829
07:00	259	363	217		425		476	838
07:15	275	439	265		384		540	3355
07:30	266	410	245		400		511	788
07:45	280	379	247	974	356	1565	527	823
08:00	264	322	247		366		511	810
08:15	299	321	284		281		583	735
08:30	304	307	263		333		567	688
08:45	346	296	264	1058	316	1296	610	602
09:00	335	312	307		334		642	640
09:15	334	272	313		332		647	612
09:30	372	319	318		344		690	2542
09:45	387	292	311	1249	349	1359	698	604
10:00	367	266	316		335		683	663
10:15	419	250	336		332		755	641
10:30	436	243	336		299		772	2554
10:45	453	232	404	1392	305	1271	857	601
11:00	389	206	408		288		797	582
11:15	438	212	433		273		871	542
11:30	435	201	431		326		866	537
11:45	478	145	402	1674	229	1116	880	494
Total	10969	18785	10345		19761		21314	38546
Percent	51.5%	48.7%	48.5%		51.3%			
Day Total	29754		30106		59860			
Peak	11:00	-	02:30	-	10:45	-	04:00	-
Vol.	1740	-	2057	-	1676	-	2125	-
P.H.F.	0.910	-	0.989	-	0.968	-	0.903	-



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Route 1A  
between Jug Handle Entrance and Exit  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 C Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/7/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sun	
12:00	160	432	155	407	315	839		
12:15	121	452	207	408	328	860		
12:30	133	460	187	414	320	874		
12:45	139	553 428	1772 173	722 448	1677 312	1275 876	3449	
01:00	152	446	211	480	363	926		
01:15	98	397	187	435	285	832		
01:30	114	465	160	468	274	933		
01:45	128	492 430	1738 113	671 442	1825 241	1163 872	3563	
02:00	136	460	119	456	255	916		
02:15	67	455	108	435	175	890		
02:30	67	451	111	469	178	920		
02:45	65	335 420	1786 105	443 495	1855 170	778 915	3641	
03:00	64	401	84	464	148	865		
03:15	64	420	104	454	168	874		
03:30	77	454	84	399	161	853		
03:45	93	298 392	1667 80	352 437	1754 173	650 829	3421	
04:00	110	467	108	431	218	898		
04:15	93	449	86	445	179	894		
04:30	139	447	93	384	232	831		
04:45	127	469 417	1780 106	393 367	1627 233	862 784	3407	
05:00	123	383	122	438	245	821		
05:15	144	412	95	422	239	834		
05:30	158	397	142	426	300	823		
05:45	188	613 379	1571 145	504 449	1735 333	1117 828	3306	
06:00	182	385	118	447	300	832		
06:15	211	415	114	360	325	775		
06:30	218	374	149	435	367	809		
06:45	214	825 376	1550 160	541 357	1599 374	1366 733	3149	
07:00	207	360	171	402	378	762		
07:15	224	301	188	366	412	667		
07:30	250	364	171	396	421	760		
07:45	230	911 290	1315 176	706 326	1490 406	1617 616	2805	
08:00	200	282	202	352	402	634		
08:15	232	309	196	325	428	634		
08:30	288	277	227	352	515	629		
08:45	293	1013 281	1149 215	840 327	1356 508	1853 608	2505	
09:00	313	244	256	304	569	548		
09:15	335	277	240	321	575	598		
09:30	382	257	336	253	718	510		
09:45	331	1361 227	1005 267	1099 244	1122 598	2460 471	2127	
10:00	312	211	283	258	595	469		
10:15	355	191	289	297	644	488		
10:30	358	186	352	261	710	447		
10:45	418	1443 167	755 339	1263 204	1020 757	2706 371	1775	
11:00	370	139	303	240	673	379		
11:15	393	142	371	194	764	336		
11:30	383	109	350	195	733	304		
11:45	428	1574 109	499 356	1380 165	794 784	2954 274	1293	
Total	9887	16587	8914	17854	18801	34441		
Percent	52.6%	48.2%	47.4%	51.8%				
Day Total		26474		26768		53242		
Peak	11:00	-	01:30	-	11:00	-	02:00	-
Vol.	1574	-	1810	-	1380	-	1882	-
P.H.F.	0.919	-	0.973	-	0.930	-	0.951	-



PRECISION  
D A T A  
INDUSTRIES, LLC

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Route 1A  
between Jug Handle Entrance and Exit  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 C Volume  
Site Code: 13796.00

Start	SB		NB		Combin ed		5/8/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Mon	
12:00	97	413	150	318	247	731		
12:15	107	381	124	352	231	733		
12:30	83	448	112	389	195	837		
12:45	84	371 388	1630 110	496 362	1421 194	867 750	3051	
01:00	83	422	82	385	165	807		
01:15	106	366	94	357	200	723		
01:30	66	419	68	383	134	802		
01:45	59	314 421	1628 67	311 411	1536 126	625 832	3164	
02:00	39	421	67	398	106	819		
02:15	44	386	66	447	110	833		
02:30	41	419	36	410	77	829		
02:45	36	160 448	1674 42	211 411	1666 78	371 859	3340	
03:00	55	426	30	480	85	906		
03:15	59	405	39	473	98	878		
03:30	79	453	42	458	121	911		
03:45	110	303 426	1710 59	170 436	1847 169	473 862	3557	
04:00	121	370	53	464	174	834		
04:15	153	359	63	433	216	792		
04:30	219	437	80	464	299	901		
04:45	245	738 363	1529 126	322 438	1799 371	1060 801	3328	
05:00	289	354	126	473	415	827		
05:15	349	338	144	458	493	796		
05:30	439	368	169	432	608	800		
05:45	503	1580 355	1415 171	610 444	1807 674	2190 799	3222	
06:00	547	330	217	438	764	768		
06:15	518	332	197	487	715	819		
06:30	506	308	225	446	731	754		
06:45	450	2021 273	1243 238	877 461	1832 688	2898 734	3075	
07:00	459	324	282	352	741	676		
07:15	464	272	291	350	755	622		
07:30	435	300	259	352	694	652		
07:45	477	1835 256	1152 258	1090 342	1396 735	2925 598	2548	
08:00	471	270	263	317	734	587		
08:15	494	280	243	319	737	599		
08:30	472	257	271	314	743	571		
08:45	438	1875 241	1048 283	1060 299	1249 721	2935 540	2297	
09:00	444	227	261	282	705	509		
09:15	445	229	286	301	731	530		
09:30	482	200	284	244	766	444		
09:45	453	1824 227	883 299	1130 256	1083 752	2954 483	1966	
10:00	380	184	306	248	686	432		
10:15	412	179	322	221	734	400		
10:30	401	166	323	240	724	406		
10:45	395	1588 160	689 345	1296 240	949 740	2884 400	1638	
11:00	436	134	322	236	758	370		
11:15	397	125	358	196	755	321		
11:30	401	84	350	198	751	282		
11:45	344	1578 80	423 343	1373 173	803 687	2951 253	1226	
Total	14187	15024	8946	17388	23133	32412		
Percent	61.3%	46.4%	38.7%	53.6%				
Day Total		29211		26334		55545		
Peak	05:45	-	02:45	-	10:45	-	03:00	-
Vol.	2074	-	1732	-	1375	-	1847	-
P.H.F.	0.948	-	0.956	-	0.960	-	0.962	-



PRECISION  
D A T A  
INDUSTRIES, LLC

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Route 1A  
between Jug Handle Entrance and Exit  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 C Volume  
Site Code: 13796.00

Start	SB				NB				Combin ed		5/9/2017		
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		Tue
12:00	95		426		110		280		205		706		
12:15	79		412		103		360		182		772		
12:30	66		370		116		357		182		727		
12:45	54	294	405	1613	111	440	325	1322	165	734	730	2935	
01:00	57		385		90		271		147		656		
01:15	49		395		87		332		136		727		
01:30	54		401		72		412		126		813		
01:45	45	205	395	1576	61	310	382	1397	106	515	777	2973	
02:00	38		469		66		382		104		851		
02:15	31		464		39		413		70		877		
02:30	51		409		55		459		106		868		
02:45	49	169	413	1755	49	209	453	1707	98	378	866	3462	
03:00	52		397		42		449		94		846		
03:15	71		457		30		496		101		953		
03:30	84		445		48		467		132		912		
03:45	106	313	438	1737	62	182	472	1884	168	495	910	3621	
04:00	113		378		65		492		178		870		
04:15	155		422		74		480		229		902		
04:30	201		422		84		447		285		869		
04:45	235	704	417	1639	102	325	481	1900	337	1029	898	3539	
05:00	266		414		128		494		394		908		
05:15	328		371		132		478		460		849		
05:30	460		414		146		487		606		901		
05:45	498	1552	382	1581	183	589	471	1930	681	2141	853	3511	
06:00	551		368		209		471		760		839		
06:15	504		334		197		488		701		822		
06:30	478		362		211		461		689		823		
06:45	483	2016	317	1381	268	885	493	1913	751	2901	810	3294	
07:00	436		311		248		456		684		767		
07:15	466		318		273		434		739		752		
07:30	470		293		245		378		715		671		
07:45	489	1861	280	1202	269	1035	310	1578	758	2896	590	2780	
08:00	491		263		294		338		785		601		
08:15	504		249		266		318		770		567		
08:30	467		234		267		341		734		575		
08:45	492	1954	228	974	253	1080	313	1310	745	3034	541	2284	
09:00	440		210		291		331		731		541		
09:15	460		249		297		323		757		572		
09:30	476		233		331		289		807		522		
09:45	429	1805	190	882	267	1186	284	1227	696	2991	474	2109	
10:00	394		204		332		252		726		456		
10:15	433		193		337		263		770		456		
10:30	441		171		342		264		783		435		
10:45	410	1678	190	758	316	1327	267	1046	726	3005	457	1804	
11:00	402		137		331		290		733		427		
11:15	413		123		323		222		736		345		
11:30	406		127		343		196		749		323		
11:45	369	1590	98	485	347	1344	166	874	716	2934	264	1359	
Total	14141		15583		8912		18088		23053		33671		
Percent	61.3%		46.3%		38.7%		53.7%						
Day Total			29724				27000				56724		
Peak	05:45	-	02:00	-	11:00	-	04:45	-	07:45	-	03:15	-	-
Vol.	2031	-	1755	-	1344	-	1940	-	3047	-	3645	-	-
P.H.F.	0.922		0.936		0.968		0.982		0.970		0.956		



Page 1

175607 D Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
01:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
02:00	2	1	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	1	2	0	0	0	0	0	0	0	0	0	0	4
05:00	9	1	0	0	0	0	0	0	0	0	0	0	0	10
06:00	143	3	1	0	0	0	0	0	0	0	0	0	0	147
07:00	211	1	0	0	0	0	0	0	0	0	0	0	0	212
08:00	120	5	1	0	0	0	0	0	0	0	0	0	0	126
09:00	32	1	0	0	0	0	0	0	0	0	0	0	0	33
10:00	18	4	0	0	0	0	0	0	0	0	0	0	0	22
11:00	21	2	0	0	0	0	0	0	0	0	0	0	0	23
12 PM	39	0	0	0	0	0	0	0	0	0	0	0	0	39
13:00	39	6	0	0	0	0	0	0	0	0	0	0	0	45
14:00	46	0	0	0	0	0	0	0	0	0	0	0	0	46
15:00	29	0	0	0	0	0	0	0	0	0	0	0	0	29
16:00	25	0	0	0	0	0	0	0	0	0	0	0	0	25
17:00	25	0	0	0	0	0	0	0	0	0	0	0	0	25
18:00	19	2	0	0	0	0	0	0	0	0	0	0	0	21
19:00	18	0	0	0	0	0	0	0	0	0	0	0	0	18
20:00	24	0	1	0	0	0	0	0	0	0	0	0	0	25
21:00	17	0	1	0	0	0	0	0	0	0	0	0	0	18
22:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
23:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	854	27	6	0	0	0	0	0	0	0	0	0	0	887
Percent	96.3%	3.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	08:00	04:00											07:00
Vol.	211	5	2											212
PM Peak	14:00	13:00	20:00											14:00
Vol.	46	6	1											46



Page 2

175607 D Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/1														
7	2	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00	8	2	0	0	0	0	0	0	0	0	0	0	0	10
06:00	155	1	0	0	0	0	0	0	0	0	0	0	0	156
07:00	215	1	0	0	0	0	0	0	0	0	0	0	0	216
08:00	113	1	1	0	0	0	0	0	0	0	0	0	0	115
09:00	24	1	0	0	0	0	0	0	0	0	0	0	0	25
10:00	17	2	0	0	0	0	0	0	0	0	0	0	0	19
11:00	23	1	1	0	0	0	0	0	0	0	0	0	0	25
12 PM	37	3	1	0	0	0	0	0	0	0	0	0	0	41
13:00	30	5	0	0	0	0	0	0	0	0	0	0	0	35
14:00	32	2	0	0	0	0	0	0	0	0	0	0	0	34
15:00	28	1	0	0	0	0	0	0	0	0	0	0	0	29
16:00	25	2	0	0	0	0	0	0	0	0	0	0	0	27
17:00	26	0	1	0	0	0	0	0	0	0	0	0	0	27
18:00	24	2	1	0	0	0	0	0	0	0	0	0	0	27
19:00	25	0	0	0	0	0	0	0	0	0	0	0	0	25
20:00	26	1	0	0	0	0	0	0	0	0	0	0	0	27
21:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
22:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
23:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	845	25	5	0	0	0	0	0	0	0	0	0	0	875
Percent	96.6%	2.9%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	05:00	08:00											07:00
Vol.	215	2	1											216
PM Peak	12:00	13:00	12:00											12:00
Vol.	37	5	1											41



Page 3

175607 D Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	2	1	0	0	0	0	0	0	0	0	0	0	0	3
01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	2	1	0	0	0	0	0	0	0	0	0	0	0	3
03:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00	4	2	0	0	0	0	0	0	0	0	0	0	0	6
06:00	116	1	0	0	0	0	0	0	0	0	0	0	0	117
07:00	179	0	0	0	0	0	0	0	0	0	0	0	0	179
08:00	98	1	0	0	0	0	0	0	0	0	0	0	0	99
09:00	27	0	0	0	0	0	0	0	0	0	0	0	0	27
10:00	27	1	0	0	0	0	0	0	0	0	0	0	0	28
11:00	45	2	0	0	0	0	0	0	0	0	0	0	0	47
12 PM	63	1	0	0	0	0	0	0	0	0	0	0	0	64
13:00	69	3	0	0	0	0	0	0	0	0	0	0	0	72
14:00	75	7	0	0	0	0	0	0	0	0	0	0	0	82
15:00	46	1	0	0	0	0	0	0	0	0	0	0	0	47
16:00	41	0	0	0	0	0	0	0	0	0	0	0	0	41
17:00	38	0	0	0	0	0	0	0	0	0	0	0	0	38
18:00	41	0	0	0	0	0	0	0	0	0	0	0	0	41
19:00	44	0	0	0	0	0	0	0	0	0	0	0	0	44
20:00	39	0	1	0	0	0	0	0	0	0	0	0	0	40
21:00	20	1	0	0	0	0	0	0	0	0	0	0	0	21
22:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
23:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	994	22	1	0	0	0	0	0	0	0	0	0	0	1017
Percent	97.7%	2.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	05:00												07:00
Vol.	179	2												179
PM Peak	14:00	14:00	20:00											14:00
Vol.	75	7	1											82



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175607 D Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
01:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
02:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
03:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
05:00	4	1	0	0	0	0	0	0	0	0	0	0	0	5
06:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
07:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
08:00	14	2	0	0	0	0	0	0	0	0	0	0	0	16
09:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
10:00	87	0	0	0	0	0	0	0	0	0	0	0	0	87
11:00	134	1	0	0	0	0	0	0	0	0	0	0	0	135
12 PM	160	2	0	0	0	0	0	0	0	0	0	0	0	162
13:00	188	5	0	0	0	0	0	0	0	0	0	0	0	193
14:00	206	3	0	0	0	0	0	0	0	0	0	0	0	209
15:00	251	2	0	0	0	0	0	0	0	0	0	0	0	253
16:00	260	1	0	0	0	0	0	0	0	0	0	0	0	261
17:00	254	1	0	0	0	0	0	0	0	0	0	0	0	255
18:00	116	2	0	0	0	0	0	0	0	0	0	0	0	118
19:00	346	2	0	0	0	0	0	0	0	0	0	0	0	348
20:00	102	0	0	0	0	0	0	0	0	0	0	0	0	102
21:00	49	0	0	0	0	0	0	0	0	0	0	0	0	49
22:00	19	1	0	0	0	0	0	0	0	0	0	0	0	20
23:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	2248	23	0	0	0	0	0	0	0	0	0	0	0	2271
Percent	99.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00												11:00
Vol.	134	2												135
PM Peak	19:00	13:00												19:00
Vol.	346	5												348





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175607 D Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/17														
7:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
01:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
02:00	2	1	0	0	0	0	0	0	0	0	0	0	0	3
03:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
05:00	5	2	0	0	0	0	0	0	0	0	0	0	0	7
06:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
08:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
09:00	10	0	0	0	0	0	0	0	0	0	0	0	0	10
10:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
11:00	48	1	0	0	0	0	0	0	0	0	0	0	0	49
12 PM	82	4	0	0	0	0	0	0	0	0	0	0	0	86
13:00	55	1	0	0	0	0	0	0	0	0	0	0	0	56
14:00	75	2	0	0	0	0	0	0	0	0	0	0	0	77
15:00	53	0	0	0	0	0	0	0	0	0	0	0	0	53
16:00	50	0	0	0	0	0	0	0	0	0	0	0	0	50
17:00	56	0	0	0	0	0	0	0	0	0	0	0	0	56
18:00	44	0	0	0	0	0	0	0	0	0	0	0	0	44
19:00	38	0	0	0	0	0	0	0	0	0	0	0	0	38
20:00	25	1	0	0	0	0	0	0	0	0	0	0	0	26
21:00	29	1	0	0	0	0	0	0	0	0	0	0	0	30
22:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
23:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	630	13	0	0	0	0	0	0	0	0	0	0	0	643
Percent	98.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	05:00												11:00
Vol.	48	2												49
PM Peak	12:00	12:00												12:00
Vol.	82	4												86



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/1														
7	4	0	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00	6	2	0	0	0	0	0	0	0	0	0	0	0	8
06:00	146	1	0	0	0	0	0	0	0	0	0	0	0	147
07:00	210	1	1	0	0	0	0	0	0	0	0	0	0	212
08:00	113	4	0	0	0	0	0	0	0	0	0	0	0	117
09:00	16	0	0	0	0	0	0	0	0	0	0	0	0	16
10:00	16	1	0	0	0	0	0	0	0	0	0	0	0	17
11:00	17	1	0	0	0	0	0	0	0	0	0	0	0	18
12 PM	24	3	1	0	0	0	0	0	0	0	0	0	0	28
13:00	28	4	1	0	0	0	0	0	0	0	0	0	0	33
14:00	15	4	0	0	0	0	0	0	0	0	0	0	0	19
15:00	22	0	0	0	0	0	0	0	0	0	0	0	0	22
16:00	17	0	0	0	0	0	0	0	0	0	0	0	0	17
17:00	13	1	1	0	0	0	0	0	0	0	0	0	0	15
18:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
19:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
20:00	29	1	1	0	0	0	0	0	0	0	0	0	0	31
21:00	13	0	0	0	0	0	0	0	0	0	0	0	0	13
22:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
23:00	7	1	0	0	0	0	0	0	0	0	0	0	0	8
Total	746	25	5	0	0	0	0	0	0	0	0	0	0	776
Percent	96.1%	3.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	08:00	07:00											07:00
Vol.	210	4	1											212
PM Peak	20:00	13:00	12:00											13:00
Vol.	29	4	1											33



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175607 D Class  
Site Code: 13796.00

[illegible]



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	17	1	0	0	0	0	0	0	0	0	0	0	0	18
01:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
02:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
03:00	3	1	0	0	0	0	0	0	0	0	0	0	0	4
04:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00	10	0	0	0	0	0	0	0	0	0	0	0	0	10
06:00	25	2	0	0	0	0	0	0	0	0	0	0	0	27
07:00	34	0	0	0	0	0	0	0	0	0	0	0	0	34
08:00	41	3	1	0	0	0	0	0	0	0	0	0	0	45
09:00	61	1	0	0	0	0	0	0	0	0	0	0	0	62
10:00	71	4	0	0	0	0	0	0	0	0	0	0	0	75
11:00	132	3	1	0	0	0	0	0	0	0	0	0	0	136
12 PM	162	4	1	0	0	0	0	0	0	0	0	0	0	167
13:00	168	2	1	0	0	0	0	0	0	0	0	0	0	171
14:00	176	0	1	0	0	0	0	0	0	0	0	0	0	177
15:00	218	0	0	0	0	0	0	0	0	0	0	0	0	218
16:00	222	0	0	0	0	0	0	0	0	0	0	0	0	222
17:00	237	4	0	0	0	0	0	0	0	0	0	0	0	241
18:00	229	1	0	0	0	0	0	0	0	0	0	0	0	230
19:00	150	0	0	0	0	0	0	0	0	0	0	0	0	150
20:00	98	1	0	0	0	0	0	0	0	0	0	0	0	99
21:00	88	2	0	0	0	0	0	0	0	0	0	0	0	90
22:00	51	1	0	0	0	0	0	0	0	0	0	0	0	52
23:00	27	1	0	0	0	0	0	0	0	0	0	0	0	28
Total	2231	31	5	0	0	0	0	0	0	0	0	0	0	2267
Percent	98.4%	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	08:00											11:00
Vol.	132	4	1											136
PM Peak	17:00	12:00	12:00											17:00
Vol.	237	4	1											241



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175607 D Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/17														
7:00	15	1	0	0	0	0	0	0	0	0	0	0	0	16
01:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
02:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
03:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
04:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
05:00	17	0	0	0	0	0	0	0	0	0	0	0	0	17
06:00	24	2	0	0	0	0	0	0	0	0	0	0	0	26
07:00	36	0	0	0	0	0	0	0	0	0	0	0	0	36
08:00	42	3	0	0	0	0	0	0	0	0	0	0	0	45
09:00	49	5	2	0	0	0	0	0	0	0	0	0	0	56
10:00	79	5	1	0	0	0	0	0	0	0	0	0	0	85
11:00	122	9	2	0	0	0	0	0	0	0	0	0	0	133
12 PM	191	2	1	0	0	0	0	0	0	0	0	0	0	194
13:00	157	2	1	0	0	0	0	0	0	0	0	0	0	160
14:00	214	2	0	0	0	0	0	0	0	0	0	0	0	216
15:00	211	5	0	0	0	0	0	0	0	0	0	0	0	216
16:00	246	3	0	0	0	0	0	0	0	0	0	0	0	249
17:00	286	2	2	0	0	0	0	0	0	0	0	0	0	290
18:00	229	2	0	0	0	0	0	0	0	0	0	0	0	231
19:00	138	0	0	0	0	0	0	0	0	0	0	0	0	138
20:00	118	1	0	0	0	0	0	0	0	0	0	0	0	119
21:00	88	3	0	0	0	0	0	0	0	0	0	0	0	91
22:00	46	2	1	0	0	0	0	0	0	0	0	0	0	49
23:00	24	1	0	0	0	0	0	0	0	0	0	0	0	25
Total	2354	50	10	0	0	0	0	0	0	0	0	0	0	2414
Percent	97.5%	2.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	09:00											11:00
Vol.	122	9	2											133
PM Peak	17:00	15:00	17:00											17:00
Vol.	286	5	2											290



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175607 D Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	15	0	0	0	0	0	0	0	0	0	0	0	0	15
01:00	11	1	0	0	0	0	0	0	0	0	0	0	0	12
02:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
03:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	11	1	0	0	0	0	0	0	0	0	0	0	0	12
05:00	10	0	0	0	0	0	0	0	0	0	0	0	0	10
06:00	12	1	1	0	0	0	0	0	0	0	0	0	0	14
07:00	45	0	0	0	0	0	0	0	0	0	0	0	0	45
08:00	46	1	1	0	0	0	0	0	0	0	0	0	0	48
09:00	78	2	0	0	0	0	0	0	0	0	0	0	0	80
10:00	120	2	1	0	0	0	0	0	0	0	0	0	0	123
11:00	214	6	1	0	0	0	0	0	0	0	0	0	0	221
12 PM	240	4	1	0	0	0	0	0	0	0	0	0	0	245
13:00	230	3	0	0	0	0	0	0	0	0	0	0	0	233
14:00	225	3	0	0	0	0	0	0	0	0	0	0	0	228
15:00	262	3	0	0	0	0	0	0	0	0	0	0	0	265
16:00	235	3	0	0	0	0	0	0	0	0	0	0	0	238
17:00	316	2	0	0	0	0	0	0	0	0	0	0	0	318
18:00	213	3	0	0	0	0	0	0	0	0	0	0	0	216
19:00	153	1	0	0	0	0	0	0	0	0	0	0	0	154
20:00	85	0	0	0	0	0	0	0	0	0	0	0	0	85
21:00	64	4	0	0	0	0	0	0	0	0	0	0	0	68
22:00	51	1	0	0	0	0	0	0	0	0	0	0	0	52
23:00	34	0	0	0	0	0	0	0	0	0	0	0	0	34
Total	2674	41	5	0	0	0	0	0	0	0	0	0	0	2720
Percent	98.3%	1.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	06:00											11:00
Vol.	214	6	1											221
PM Peak	17:00	12:00	12:00											17:00
Vol.	316	4	1											318

[illegible]



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/1														
7	26	2	0	0	0	0	0	0	0	0	0	0	0	28
01:00	9	0	1	0	0	0	0	0	0	0	0	0	0	10
02:00	13	1	0	0	0	0	0	0	0	0	0	0	0	14
03:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
04:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6
05:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
06:00	9	0	0	0	0	0	0	0	0	0	0	0	0	9
07:00	18	0	0	0	0	0	0	0	0	0	0	0	0	18
08:00	30	1	0	0	0	0	0	0	0	0	0	0	0	31
09:00	50	0	0	0	0	0	0	0	0	0	0	0	0	50
10:00	82	3	0	0	0	0	0	0	0	0	0	0	0	85
11:00	163	1	0	0	0	0	0	0	0	0	0	0	0	164
12 PM	232	2	0	0	0	0	0	0	0	0	0	0	0	234
13:00	200	2	0	0	0	0	0	0	0	0	0	0	0	202
14:00	218	0	0	0	0	0	0	0	0	0	0	0	0	218
15:00	193	1	0	0	0	0	0	0	0	0	0	0	0	194
16:00	142	0	0	0	0	0	0	0	0	0	0	0	0	142
17:00	170	1	0	0	0	0	0	0	0	0	0	0	0	171
18:00	134	1	0	0	0	0	0	0	0	0	0	0	0	135
19:00	108	1	0	0	0	0	0	0	0	0	0	0	0	109
20:00	88	2	0	0	0	0	0	0	0	0	0	0	0	90
21:00	47	1	0	0	0	0	0	0	0	0	0	0	0	48
22:00	25	0	0	0	0	0	0	0	0	0	0	0	0	25
23:00	23	1	0	0	0	0	0	0	0	0	0	0	0	24
Total	1998	20	1	0	0	0	0	0	0	0	0	0	0	2019
Percent	99.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	01:00											11:00
Vol.	163	3	1											164
PM Peak	12:00	12:00											12:00	
Vol.	232	2											234	





Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/1														
7	13	1	0	0	0	0	0	0	0	0	0	0	0	14
01:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
02:00	3	1	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00	14	0	0	0	0	0	0	0	0	0	0	0	0	14
06:00	16	0	0	0	0	0	0	0	0	0	0	0	0	16
07:00	46	2	0	0	0	0	0	0	0	0	0	0	0	48
08:00	36	2	0	0	0	0	0	0	0	0	0	0	0	38
09:00	46	1	0	0	0	0	0	0	0	0	0	0	0	47
10:00	68	2	0	0	0	0	0	0	0	0	0	0	0	70
11:00	89	2	1	0	0	0	0	0	0	0	0	0	0	92
12 PM	128	1	1	0	0	0	0	0	0	0	0	0	0	130
13:00	121	5	0	0	0	0	0	0	0	0	0	0	0	126
14:00	162	4	4	0	0	0	0	0	0	0	0	0	0	170
15:00	222	1	0	0	0	0	0	0	0	0	0	0	0	223
16:00	247	4	0	0	0	0	0	0	0	0	0	0	0	251
17:00	296	2	0	0	0	0	0	0	0	0	0	0	0	298
18:00	207	2	0	0	0	0	0	0	0	0	0	0	0	209
19:00	121	1	0	0	0	0	0	0	0	0	0	0	0	122
20:00	84	4	0	0	0	0	0	0	0	0	0	0	0	88
21:00	63	1	0	0	0	0	0	0	0	0	0	0	0	64
22:00	32	1	0	0	0	0	0	0	0	0	0	0	0	33
23:00	29	1	0	0	0	0	0	0	0	0	0	0	0	30
Total	2052	38	6	0	0	0	0	0	0	0	0	0	0	2096
Percent	97.9%	1.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	07:00	11:00											11:00
Vol.	89	2	1											92
PM Peak	17:00	13:00	14:00											17:00
Vol.	296	5	4											298



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/17														
7:00	8	1	0	0	0	0	0	0	0	0	0	0	0	9
01:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
02:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
03:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
04:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00	10	0	0	0	0	0	0	0	0	0	0	0	0	10
06:00	27	2	0	0	0	0	0	0	0	0	0	0	0	29
07:00	48	2	0	0	0	0	0	0	0	0	0	0	0	50
08:00	39	0	0	0	0	0	0	0	0	0	0	0	0	39
09:00	49	1	0	0	0	0	0	0	0	0	0	0	0	50
10:00	72	4	1	0	0	0	0	0	0	0	0	0	0	77
11:00	99	4	0	0	0	0	0	0	0	0	0	0	0	103
12 PM	110	2	1	0	0	0	0	0	0	0	0	0	0	113
13:00	119	5	2	0	0	0	0	0	0	0	0	0	0	126
14:00	177	0	0	0	0	0	0	0	0	0	0	0	0	177
15:00	228	0	0	0	0	0	0	0	0	0	0	0	0	228
16:00	249	4	0	0	0	0	0	0	0	0	0	0	0	253
17:00	323	2	0	0	0	0	0	0	0	0	0	0	0	325
18:00	202	2	0	0	0	0	0	0	0	0	0	0	0	204
19:00	141	0	0	0	0	0	0	0	0	0	0	0	0	141
20:00	72	2	0	0	0	0	0	0	0	0	0	0	0	74
21:00	62	3	0	0	0	0	0	0	0	0	0	0	0	65
22:00	34	1	0	0	0	0	0	0	0	0	0	0	0	35
23:00	19	1	0	0	0	0	0	0	0	0	0	0	0	20
Total	2106	36	4	0	0	0	0	0	0	0	0	0	0	2146
Percent	98.1%	1.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	10:00											11:00
Vol.	99	4	1											103
PM Peak	17:00	13:00	13:00											17:00
Vol.	323	5	2											325



PRECISION  
D A T A  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Tomasello Drive  
east of Route 1A  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 D Volume  
Site Code: 13796.00

Start Time	5/3/2017		5/4/2017		5/5/2017		5/6/2017		5/7/2017		5/8/2017		5/9/2017		Week Average	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	4	18	2	16	3	15	5	23	4	28	4	14	6	9	4	18
01:00	2	4	2	5	1	12	3	11	4	10	0	7	1	7	2	8
02:00	3	4	0	3	3	3	3	10	3	14	2	4	1	4	2	6
03:00	0	4	1	7	2	1	1	10	2	7	0	0	1	4	1	5
04:00	4	3	2	7	3	12	4	3	4	6	2	2	4	3	3	5
05:00	10	10	10	17	6	10	5	6	7	5	8	14	11	10	8	10
06:00	147	27	156	26	117	14	7	10	2	9	147	16	187	29	109	19
07:00	212	34	216	36	179	45	8	30	7	18	212	48	235	50	153	37
08:00	126	45	115	45	99	48	16	39	5	31	117	38	115	39	85	41
09:00	33	62	25	56	27	80	21	139	10	50	16	47	43	50	25	69
10:00	22	75	19	85	28	123	87	272	21	85	17	70	20	77	31	112
11:00	23	136	25	133	47	221	135	408	49	164	18	92	18	103	45	180
12:00 PM	39	167	41	194	64	245	162	486	86	234	28	130	23	113	63	224
01:00	45	171	35	160	72	233	193	511	56	202	33	126	30	126	66	218
02:00	46	177	34	216	82	228	209	527	77	218	19	170	33	177	71	245
03:00	29	218	29	216	47	265	253	475	53	194	22	223	19	228	65	260
04:00	25	222	27	249	41	238	261	439	50	142	17	251	17	253	63	256
05:00	25	241	27	290	38	318	255	408	56	171	15	298	16	325	62	293
06:00	21	230	27	231	41	216	118	231	44	135	21	209	18	204	41	208
07:00	18	150	25	138	44	154	348	187	38	109	21	122	17	141	73	143
08:00	25	99	27	119	40	85	102	107	26	90	31	88	16	74	38	95
09:00	18	90	21	91	21	68	49	73	30	48	13	64	18	65	24	71
10:00	8	52	4	49	7	52	20	51	8	25	5	33	10	35	9	42
11:00	2	28	5	25	5	34	6	37	1	24	8	30	6	20	5	28
Total	887	2267	875	2414	1017	2720	2271	4493	643	2019	776	2096	865	2146	1048	2593
Day	3154		3289		3737		6764		2662		2872		3011		3641	
AM Peak	07:00	11:00	07:00	11:00	07:00	11:00	11:00	11:00	11:00	11:00	07:00	11:00	07:00	11:00	07:00	11:00
Vol.	212	136	216	133	179	221	135	408	49	164	212	92	235	103	153	180
PM Peak	14:00	17:00	12:00	17:00	14:00	17:00	19:00	14:00	12:00	12:00	13:00	17:00	14:00	17:00	19:00	17:00
Vol.	46	241	41	290	82	318	348	527	86	234	33	298	33	325	73	293

Comb. Total	3154	3289	3737	6764	2662	2872	3011	3641
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ADT	ADT 3,641	AADT 3,641
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PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Tomasello Drive  
east of Route 1A  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 D Volume  
Site Code: 13796.00

Start	WB		EB		Combin		5/3/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Wed	
12:00	0	7	7	41	7	48		
12:15	3	6	6	35	9	41		
12:30	0	14	2	39	2	53		
12:45	1	12	3	52	4	64	206	
01:00	1	18	1	47	2	65		
01:15	0	8	0	38	0	46		
01:30	1	10	2	49	3	59		
01:45	0	9	1	37	1	46	216	
02:00	1	6	0	38	1	44		
02:15	0	14	1	42	1	56		
02:30	0	13	1	52	1	65		
02:45	2	13	2	45	4	58	223	
03:00	0	8	1	41	1	49		
03:15	0	5	0	59	0	64		
03:30	0	9	2	58	2	67		
03:45	0	7	1	60	1	67	247	
04:00	0	1	0	55	0	56		
04:15	1	11	0	53	1	64		
04:30	3	6	0	56	3	62		
04:45	0	7	3	58	3	65	247	
05:00	0	3	0	48	0	51		
05:15	1	8	1	62	2	70		
05:30	4	3	4	60	8	63		
05:45	5	11	5	71	10	82	266	
06:00	13	6	6	68	19	74		
06:15	35	7	7	53	42	60		
06:30	43	4	5	52	48	56		
06:45	56	4	9	57	65	61	251	
07:00	61	9	8	38	69	47		
07:15	61	3	6	52	67	55		
07:30	51	2	9	31	60	33		
07:45	39	4	11	29	50	33	168	
08:00	38	5	9	18	47	23		
08:15	35	5	11	23	46	28		
08:30	29	9	8	32	37	41		
08:45	24	6	17	26	41	32	124	
09:00	14	5	16	20	30	25		
09:15	11	5	13	27	24	32		
09:30	4	3	17	29	21	32		
09:45	4	5	16	14	20	19	108	
10:00	8	1	19	13	27	14		
10:15	3	1	12	16	15	17		
10:30	4	3	22	14	26	17		
10:45	7	3	22	9	29	12	60	
11:00	9	1	33	11	42	12		
11:15	6	0	31	9	37	9		
11:30	5	0	35	4	40	4		
11:45	3	1	37	4	40	5	30	
Total	586	301	422	1845	1008	2146		
Percent	58.1%	14.0%	41.9%	86.0%				
Day Total		887		2267		3154		
Peak	06:45	-	00:30	-	05:15	-	05:15	-
Vol.	229	-	52	-	136	-	289	-
P.H.F.	0.939	-	0.722	-	0.919	-	0.881	-



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175607 D Volume  
Site Code: 13796.00

Start	WB		EB		Combin		5/4/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Thu	
12:00	2	11	6	48	8	59		
12:15	0	14	4	59	4	73		
12:30	0	12	2	49	2	61		
12:45	0	4	4	38	4	42	235	
01:00	2	11	0	41	2	52		
01:15	0	13	3	40	3	53		
01:30	0	4	2	34	2	38		
01:45	0	7	0	45	0	52	195	
02:00	0	8	0	47	0	55		
02:15	0	10	0	63	0	73		
02:30	0	10	2	55	2	65		
02:45	0	6	1	51	1	57	250	
03:00	0	7	2	48	2	55		
03:15	0	4	2	52	2	56		
03:30	0	11	1	56	1	67		
03:45	1	7	2	60	3	67	245	
04:00	0	9	2	49	2	58		
04:15	0	6	0	63	0	69		
04:30	2	6	4	81	6	87		
04:45	0	6	1	56	1	62	276	
05:00	1	6	1	70	2	76		
05:15	0	9	5	77	5	86		
05:30	2	7	3	73	5	80		
05:45	7	5	8	70	15	75	317	
06:00	8	11	5	67	13	78		
06:15	33	8	1	59	34	67		
06:30	59	7	9	56	68	63		
06:45	56	1	11	49	67	50	258	
07:00	67	7	13	33	80	40		
07:15	68	7	6	52	74	59		
07:30	42	5	8	30	50	35		
07:45	39	6	9	23	48	29	163	
08:00	42	10	9	41	51	51		
08:15	35	4	15	20	50	24		
08:30	30	6	7	32	37	38		
08:45	8	7	14	26	22	33	146	
09:00	8	6	17	21	25	27		
09:15	10	5	16	33	26	38		
09:30	4	6	8	18	12	24		
09:45	3	4	15	19	18	23	112	
10:00	4	1	15	11	19	12		
10:15	6	0	23	19	29	19		
10:30	3	1	15	10	18	11		
10:45	6	2	32	9	38	11	53	
11:00	7	1	22	8	29	9		
11:15	8	1	31	6	39	7		
11:30	1	3	37	6	38	9		
11:45	9	0	43	5	52	5	30	
Total	573	302	436	1978	1009	2280		
Percent	56.8%	13.2%	43.2%	86.8%				
Day Total		875		2414		3289		
Peak	06:30	-	12:00	-	05:00	-	06:30	-
Vol.	250	-	41	-	133	-	289	-
P.H.F.	0.919	-	0.732	-	0.773	-	0.903	-



PRECISION  
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Tomasello Drive  
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175607 D Volume  
Site Code: 13796.00

Start	WB		EB		Combin		5/5/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	1	16	5	69	6	85		
12:15	1	19	3	58	4	77		
12:30	1	13	1	60	2	73		
12:45	0	3	16	64	6	74	309	
01:00	0	15	2	15	2	80		
01:15	0	26	4	58	4	84		
01:30	1	18	3	52	4	70		
01:45	0	1	13	72	3	71	305	
02:00	0	17	0	51	0	68		
02:15	1	29	3	57	4	86		
02:30	1	18	0	64	1	82		
02:45	1	3	18	82	1	74	310	
03:00	1	14	0	67	1	81		
03:15	0	11	0	77	0	88		
03:30	1	10	1	55	2	65		
03:45	0	2	12	47	0	78	312	
04:00	0	8	1	61	1	69		
04:15	2	15	3	65	5	80		
04:30	0	11	2	57	2	68		
04:45	1	3	7	41	7	62	279	
05:00	2	8	0	81	2	89		
05:15	0	10	3	85	3	95		
05:30	2	12	1	82	3	94		
05:45	2	6	8	38	8	78	356	
06:00	1	7	2	63	3	70		
06:15	25	14	5	56	30	70		
06:30	42	15	2	46	44	61		
06:45	49	117	5	41	54	56	257	
07:00	43	15	8	50	51	65		
07:15	53	11	12	33	65	44		
07:30	42	13	14	37	56	50		
07:45	41	179	5	44	52	39	198	
08:00	28	11	14	26	42	37		
08:15	30	8	10	23	40	31		
08:30	25	8	11	21	36	29		
08:45	16	99	13	40	29	28	125	
09:00	7	9	19	12	26	21		
09:15	10	4	16	16	26	20		
09:30	6	4	14	25	20	29		
09:45	4	27	4	21	35	19	89	
10:00	5	3	27	15	32	18		
10:15	8	3	28	14	36	17		
10:30	4	1	33	13	37	14		
10:45	11	28	0	7	46	10	59	
11:00	9	1	42	7	51	8		
11:15	14	0	57	10	71	10		
11:30	10	2	59	10	69	12		
11:45	14	47	2	5	77	9	39	
Total	515	502	584	2136	1099	2638		
Percent	46.9%	19.0%	53.1%	81.0%				
Day Total		1017		2720		3737		
Peak	06:30	-	02:00	-	11:00	-	05:00	-
Vol.	187	-	82	-	221	-	356	-
P.H.F.	0.882	-	0.707	-	0.877	-	0.937	-



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Tomasello Drive  
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175607 D Volume  
Site Code: 13796.00

Start	WB		EB		Combin		5/6/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sat	
12:00	0	42	8	132	8	174		
12:15	1	31	5	115	6	146		
12:30	3	36	7	127	10	163		
12:45	1	53	3	112	4	165	648	
01:00	1	60	4	133	5	193		
01:15	0	40	3	132	3	172		
01:30	1	44	4	126	5	170		
01:45	1	49	0	120	1	169	704	
02:00	1	63	3	126	4	189		
02:15	1	51	5	135	6	186		
02:30	1	50	1	140	2	190		
02:45	0	45	1	126	1	171	736	
03:00	1	62	6	128	7	190		
03:15	0	54	3	115	3	169		
03:30	0	60	1	116	1	176		
03:45	0	77	0	116	0	193	728	
04:00	2	62	0	105	2	167		
04:15	1	60	2	111	3	171		
04:30	1	68	1	129	2	197		
04:45	0	71	0	94	0	165	700	
05:00	0	55	1	105	1	160		
05:15	2	54	2	112	4	166		
05:30	1	71	0	97	1	168		
05:45	2	75	3	94	5	169	663	
06:00	0	44	1	87	1	131		
06:15	3	29	3	58	6	87		
06:30	2	16	0	46	2	62		
06:45	2	29	6	40	8	69	349	
07:00	3	149	4	49	7	198		
07:15	3	111	10	51	13	162		
07:30	1	46	9	51	10	97		
07:45	1	42	7	36	8	78	535	
08:00	5	42	3	39	8	81		
08:15	1	16	6	24	7	40		
08:30	4	27	11	20	15	47		
08:45	6	17	19	24	25	41	209	
09:00	7	15	21	10	28	25		
09:15	4	5	22	25	26	30		
09:30	3	21	38	17	41	38		
09:45	7	8	58	21	65	29	122	
10:00	11	6	71	20	82	26		
10:15	26	7	61	10	87	17		
10:30	21	5	63	8	84	13		
10:45	29	2	77	13	106	15	71	
11:00	31	2	108	11	139	13		
11:15	39	1	103	8	142	9		
11:30	29	0	99	4	128	4		
11:45	36	3	98	14	134	17	43	
Total	295	1976	961	3532	1256	5508		
Percent	23.5%	35.9%	76.5%	64.1%				
Day Total		2271		4493		6764		
Peak	11:00	- 07:00	- 11:00	- 02:15	- 11:00	- 02:15	- -	-
Vol.	135	- 348	- 408	- 529	- 543	- 737	- -	-
P.H.F.	0.865	- 0.584	- 0.944	- 0.945	- 0.956	- 0.970		



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175607 D Volume  
Site Code: 13796.00

Start	WB		EB		Combin		5/7/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sun	
12:00	1	21	3	46	4	67		
12:15	0	22	14	66	14	88		
12:30	2	20	7	58	9	78		
12:45	1	4	23	86	4	28	64	234
01:00	1	14	4	61	5	32	87	320
01:15	1	11	3	44	4	55		
01:30	0	21	2	41	2	62		
01:45	2	4	10	56	3	14	66	258
02:00	1	18	4	51	5	69		
02:15	0	21	5	50	5	71		
02:30	1	23	3	63	4	86		
02:45	1	3	15	77	2	14	54	218
03:00	0	10	3	51	3	61		
03:15	2	9	2	35	4	44		
03:30	0	13	0	54	0	67		
03:45	0	2	21	53	2	7	54	194
04:00	1	15	2	44	3	59		
04:15	1	16	2	37	3	53		
04:30	1	8	1	34	2	42		
04:45	1	4	11	50	1	6	27	142
05:00	0	13	0	43	0	56		
05:15	3	19	2	51	5	70		
05:30	0	9	0	50	0	59		
05:45	4	7	15	56	3	5	27	171
06:00	0	9	0	39	0	48		
06:15	0	15	0	32	0	47		
06:30	2	13	5	41	7	54		
06:45	0	2	7	44	4	9	23	135
07:00	3	9	7	34	10	43		
07:15	0	5	5	22	5	27		
07:30	2	7	3	24	5	31		
07:45	2	7	17	38	3	18	29	109
08:00	1	9	3	21	4	30		
08:15	1	5	9	21	10	26		
08:30	3	7	14	28	17	35		
08:45	0	5	5	26	5	31	20	90
09:00	2	8	9	14	11	22		
09:15	3	3	8	17	11	20		
09:30	2	8	8	8	10	16		
09:45	3	10	11	30	25	50	9	48
10:00	4	5	20	20	4	24	28	60
10:15	4	1	9	7	13	8		
10:30	6	1	29	10	35	11		
10:45	7	21	1	8	27	85	4	25
11:00	12	0	39	7	51	106	34	106
11:15	7	0	28	8	35	8		
11:30	9	0	33	3	42	3		
11:45	21	49	1	1	64	164	6	24
Total	118	525	427	1592	545	2117		
Percent	21.7%	24.8%	78.3%	75.2%				
Day Total		643		2019		2662		
Peak	11:00	-	12:00	-	11:00	-	00:15	-
Vol.	49	-	86	-	164	-	249	-
P.H.F.	0.583	-	0.935	-	0.641	-	0.943	-





PRECISION  
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City, State: Boston, MA  
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175607 D Volume  
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Start	WB		EB		Combin		5/8/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Mon	
12:00	0	10	3	29	3	39		
12:15	2	10	4	33	6	43		
12:30	2	3	6	39	8	42		
12:45	0	4	5	28	1	14	29	130
01:00	0	7	2	25	2	32		
01:15	0	13	1	41	1	54		
01:30	0	5	1	27	1	32		
01:45	0	0	8	33	3	7	41	159
02:00	0	7	2	36	2	43		
02:15	1	3	0	38	1	41		
02:30	0	2	1	47	1	49		
02:45	1	2	7	19	1	4	49	170
03:00	0	7	0	37	0	44		
03:15	0	3	0	43	0	46		
03:30	0	7	0	73	0	80		
03:45	0	0	5	22	0	0	70	223
04:00	0	3	0	50	0	53		
04:15	0	5	2	61	2	66		
04:30	1	6	0	70	1	76		
04:45	1	2	3	17	0	2	70	251
05:00	0	5	1	68	1	73		
05:15	2	3	4	83	6	86		
05:30	4	2	3	67	7	69		
05:45	2	8	5	15	6	14	80	298
06:00	6	7	7	63	13	70		
06:15	26	5	4	56	30	61		
06:30	48	4	0	50	48	54		
06:45	67	147	5	21	5	16	40	209
07:00	52	6	7	34	59	40		
07:15	61	2	15	40	76	42		
07:30	53	7	10	21	63	28		
07:45	46	212	6	21	16	48	27	122
08:00	37	7	9	24	46	31		
08:15	36	8	7	21	43	29		
08:30	24	6	10	26	34	32		
08:45	20	117	10	31	12	38	17	88
09:00	5	3	11	24	16	27		
09:15	5	2	11	17	16	19		
09:30	1	4	15	12	16	16		
09:45	5	16	4	13	10	47	11	64
10:00	2	1	17	4	19	5		
10:15	5	3	13	10	18	13		
10:30	6	0	13	14	19	14		
10:45	4	17	1	5	27	70	5	33
11:00	6	3	18	11	24	14		
11:15	4	2	13	9	17	11		
11:30	3	1	36	7	39	8		
11:45	5	18	2	8	25	92	3	30
Total	543	233	352	1744	895	1977		
Percent	60.7%	11.8%	39.3%	88.2%				
Day Total		776		2096		2872		
Peak	06:45	-	01:00	-	10:45	-	05:00	-
Vol.	233	-	33	-	94	-	298	-
P.H.F.	0.869	-	0.635	-	0.653	-	0.898	-



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Tomasello Drive  
east of Route 1A  
City, State: Boston, MA  
Client: VHB/ A. Berthume

175607 D Volume  
Site Code: 13796.00

Start	WB				EB				Combin ed		5/9/2017		
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		Tue
12:00	1		4		1		29		2		33		
12:15	2		4		1		25		3		29		
12:30	3		9		5		32		8		41		
12:45	0	6	6	23	2	9	27	113	2	15	33	136	
01:00	0		12		5		20		5		32		
01:15	1		7		1		31		2		38		
01:30	0		7		1		37		1		44		
01:45	0	1	4	30	0	7	38	126	0	8	42	156	
02:00	1		7		1		36		2		43		
02:15	0		12		2		39		2		51		
02:30	0		10		0		51		0		61		
02:45	0	1	4	33	1	4	51	177	1	5	55	210	
03:00	0		4		0		51		0		55		
03:15	0		7		1		52		1		59		
03:30	1		5		2		56		3		61		
03:45	0	1	3	19	1	4	69	228	1	5	72	247	
04:00	1		6		0		58		1		64		
04:15	0		3		1		73		1		76		
04:30	1		4		0		51		1		55		
04:45	2	4	4	17	2	3	71	253	4	7	75	270	
05:00	3		3		3		79		6		82		
05:15	2		4		4		74		6		78		
05:30	1		3		2		84		3		87		
05:45	5	11	6	16	1	10	88	325	6	21	94	341	
06:00	11		3		6		51		17		54		
06:15	38		5		8		49		46		54		
06:30	65		4		8		58		73		62		
06:45	73	187	6	18	7	29	46	204	80	216	52	222	
07:00	73		8		15		47		88		55		
07:15	59		3		10		42		69		45		
07:30	55		2		13		30		68		32		
07:45	48	235	4	17	12	50	22	141	60	285	26	158	
08:00	33		7		8		18		41		25		
08:15	32		6		7		19		39		25		
08:30	39		1		9		18		48		19		
08:45	11	115	2	16	15	39	19	74	26	154	21	90	
09:00	12		9		12		24		24		33		
09:15	12		1		10		13		22		14		
09:30	9		2		10		12		19		14		
09:45	10	43	6	18	18	50	16	65	28	93	22	83	
10:00	4		2		15		13		19		15		
10:15	3		3		18		5		21		8		
10:30	6		3		20		9		26		12		
10:45	7	20	2	10	24	77	8	35	31	97	10	45	
11:00	3		0		21		7		24		7		
11:15	4		2		29		6		33		8		
11:30	5		1		26		3		31		4		
11:45	6	18	3	6	27	103	4	20	33	121	7	26	
Total	642		223		385		1761		1027		1984		
Percent	62.5%		11.2%		37.5%		88.8%						
Day Total		865				2146				3011			
Peak	06:30	-	00:30	-	11:00	-	05:00	-	06:30	-	05:00	-	-
Vol.	270	-	34	-	103	-	325	-	310	-	341	-	-
P.H.F.	0.925		0.708		0.888		0.923		0.881		0.907		



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/1														
7	7	0	0	0	0	0	0	0	0	0	0	0	0	7
01:00	11	0	0	0	0	0	0	0	0	0	0	0	0	11
02:00	21	0	1	0	0	0	0	0	0	0	0	0	0	22
03:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
04:00	11	1	0	0	0	0	0	0	0	0	0	0	0	12
05:00	23	0	2	0	0	0	0	0	0	0	0	0	0	25
06:00	194	4	1	0	0	0	0	0	0	0	0	0	0	199
07:00	309	6	0	0	0	0	0	0	0	0	0	0	0	315
08:00	283	5	1	0	0	0	0	0	0	0	0	0	0	289
09:00	241	7	0	0	0	0	0	0	0	0	0	0	0	248
10:00	274	8	1	0	0	0	0	0	0	0	0	0	0	283
11:00	332	7	2	0	0	0	0	0	0	0	0	0	0	341
12 PM	422	2	0	0	0	0	0	0	0	0	0	0	0	424
13:00	391	10	0	0	0	0	0	0	0	0	0	0	0	401
14:00	339	8	0	0	0	0	0	0	0	0	0	0	0	347
15:00	325	5	0	0	0	0	0	0	0	0	0	0	0	330
16:00	327	3	1	0	0	0	0	0	0	0	0	0	0	331
17:00	337	1	0	0	0	0	0	0	0	0	0	0	0	338
18:00	347	2	0	0	0	0	0	0	0	0	0	0	0	349
19:00	309	1	1	0	0	0	0	0	0	0	0	0	0	311
20:00	219	1	0	0	0	0	0	0	0	0	0	0	0	220
21:00	131	1	0	0	0	0	0	0	0	0	0	0	0	132
22:00	76	2	0	0	0	0	0	0	0	0	0	0	0	78
23:00	21	1	0	0	0	0	0	0	0	0	0	0	0	22
Total	4957	75	10	0	0	0	0	0	0	0	0	0	0	5042
Percent	98.3%	1.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	05:00											11:00
Vol.	332	8	2											341
PM Peak	12:00	13:00	16:00											12:00
Vol.	422	10	1											424



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/1														
7	12	0	0	0	0	0	0	0	0	0	0	0	0	12
01:00	9	0	0	0	0	0	0	0	0	0	0	0	0	9
02:00	15	0	0	0	0	0	0	0	0	0	0	0	0	15
03:00	4	1	2	0	0	0	0	0	0	0	0	0	0	7
04:00	14	0	1	0	0	0	0	0	0	0	0	0	0	15
05:00	20	0	1	0	0	0	0	0	0	0	0	0	0	21
06:00	211	4	1	0	0	0	0	0	0	0	0	0	0	216
07:00	314	7	1	0	0	0	0	0	0	0	0	0	0	322
08:00	281	2	0	0	0	0	0	0	0	0	0	0	0	283
09:00	191	6	1	0	0	0	0	0	0	0	0	0	0	198
10:00	256	4	1	0	0	0	0	0	0	0	0	0	0	261
11:00	358	7	0	0	0	0	0	0	0	0	0	0	0	365
12 PM	430	6	1	0	0	0	0	0	0	0	0	0	0	437
13:00	374	7	0	0	0	0	0	0	0	0	0	0	0	381
14:00	354	6	0	0	0	0	0	0	0	0	0	0	0	360
15:00	394	2	0	0	0	0	0	0	0	0	0	0	0	396
16:00	370	1	0	0	0	0	0	0	0	0	0	0	0	371
17:00	379	2	0	0	0	0	0	0	0	0	0	0	0	381
18:00	373	2	0	0	0	0	0	0	0	0	0	0	0	375
19:00	336	1	0	0	0	0	0	0	0	0	0	0	0	337
20:00	214	0	1	0	0	0	0	0	0	0	0	0	0	215
21:00	132	1	0	0	0	0	0	0	0	0	0	0	0	133
22:00	67	1	0	0	0	0	0	0	0	0	0	0	0	68
23:00	18	0	0	0	0	0	0	0	0	0	0	0	0	18
Total	5126	60	10	0	0	0	0	0	0	0	0	0	0	5196
Percent	98.7%	1.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	07:00	03:00											11:00
Vol.	358	7	2											365
PM Peak	12:00	13:00	12:00											12:00
Vol.	430	7	1											437



Page 3

175607 E Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	18	1	0	0	0	0	0	0	0	0	0	0	0	19
01:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
02:00	16	1	0	0	0	0	0	0	0	0	0	0	0	17
03:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
04:00	13	0	0	0	0	0	0	0	0	0	0	0	0	13
05:00	25	2	0	0	0	0	0	0	0	0	0	0	0	27
06:00	167	2	1	0	0	0	0	0	0	0	0	0	0	170
07:00	298	6	1	0	0	0	0	0	0	0	0	0	0	305
08:00	302	2	2	0	0	0	0	0	0	0	0	0	0	306
09:00	266	7	1	0	0	0	0	0	0	0	0	0	0	274
10:00	331	7	0	0	0	0	0	0	0	0	0	0	0	338
11:00	483	8	0	0	0	0	0	0	0	0	0	0	0	491
12 PM	494	6	1	0	0	0	0	0	0	0	0	0	0	501
13:00	434	9	0	0	0	0	0	0	0	0	0	0	0	443
14:00	442	6	1	0	0	0	0	0	0	0	0	0	0	449
15:00	421	1	0	0	0	0	0	0	0	0	0	0	0	422
16:00	369	1	0	0	0	0	0	0	0	0	0	0	0	370
17:00	350	4	0	0	0	0	0	0	0	0	0	0	0	354
18:00	336	2	1	0	0	0	0	0	0	0	0	0	0	339
19:00	296	1	0	0	0	0	0	0	0	0	0	0	0	297
20:00	208	1	0	0	0	0	0	0	0	0	0	0	0	209
21:00	134	0	0	0	0	0	0	0	0	0	0	0	0	134
22:00	62	1	0	0	0	0	0	0	0	0	0	0	0	63
23:00	23	0	0	0	0	0	0	0	0	0	0	0	0	23
Total	5498	68	8	0	0	0	0	0	0	0	0	0	0	5574
Percent	98.6%	1.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	08:00											11:00
Vol.	483	8	2											491
PM Peak	12:00	13:00	12:00											12:00
Vol.	494	9	1											501



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
01:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
02:00	14	0	0	0	0	0	0	0	0	0	0	0	0	14
03:00	3	1	0	0	0	0	0	0	0	0	0	0	0	4
04:00	12	1	1	0	0	0	0	0	0	0	0	0	0	14
05:00	13	1	0	0	0	0	0	0	0	0	0	0	0	14
06:00	39	5	0	0	0	0	0	0	0	0	0	0	0	44
07:00	100	6	1	0	0	0	0	0	0	0	0	0	0	107
08:00	180	2	2	0	0	0	0	0	0	0	0	0	0	184
09:00	337	1	0	0	0	0	0	0	0	0	0	0	0	338
10:00	466	4	0	0	0	0	0	0	0	0	0	0	0	470
11:00	647	3	1	0	0	0	0	0	0	0	0	0	0	651
12 PM	707	5	0	0	0	0	0	0	0	0	0	0	0	712
13:00	720	3	0	0	0	0	0	0	0	0	0	0	0	723
14:00	670	3	0	0	0	0	0	0	0	0	0	0	0	673
15:00	626	2	0	0	0	0	0	0	0	0	0	0	0	628
16:00	607	3	0	0	0	0	0	0	0	0	0	0	0	610
17:00	535	1	0	0	0	0	0	0	0	0	0	0	0	536
18:00	392	0	0	0	0	0	0	0	0	0	0	0	0	392
19:00	376	0	0	0	0	0	0	0	0	0	0	0	0	376
20:00	271	1	1	0	0	0	0	0	0	0	0	0	0	273
21:00	162	0	0	0	0	0	0	0	0	0	0	0	0	162
22:00	70	0	0	0	0	0	0	0	0	0	0	0	0	70
23:00	18	0	0	0	0	0	0	0	0	0	0	0	0	18
Total	6981	42	6	0	0	0	0	0	0	0	0	0	0	7029
Percent	99.3%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	07:00	08:00											11:00
Vol.	647	6	2											651
PM Peak	13:00	12:00	20:00											13:00
Vol.	720	5	1											723



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/1														
7	15	0	0	0	0	0	0	0	0	0	0	0	0	15
01:00	13	2	0	0	0	0	0	0	0	0	0	0	0	15
02:00	12	0	0	0	0	0	0	0	0	0	0	0	0	12
03:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
04:00	8	2	1	0	0	0	0	0	0	0	0	0	0	11
05:00	10	0	0	0	0	0	0	0	0	0	0	0	0	10
06:00	36	2	0	0	0	0	0	0	0	0	0	0	0	38
07:00	99	1	0	0	0	0	0	0	0	0	0	0	0	100
08:00	163	0	0	0	0	0	0	0	0	0	0	0	0	163
09:00	278	1	0	0	0	0	0	0	0	0	0	0	0	279
10:00	390	2	1	0	0	0	0	0	0	0	0	0	0	393
11:00	511	2	0	0	0	0	0	0	0	0	0	0	0	513
12 PM	581	2	0	0	0	0	0	0	0	0	0	0	0	583
13:00	580	1	0	0	0	0	0	0	0	0	0	0	0	581
14:00	566	1	0	0	0	0	0	0	0	0	0	0	0	567
15:00	476	2	0	0	0	0	0	0	0	0	0	0	0	478
16:00	441	0	0	0	0	0	0	0	0	0	0	0	0	441
17:00	366	1	0	0	0	0	0	0	0	0	0	0	0	367
18:00	384	0	0	0	0	0	0	0	0	0	0	0	0	384
19:00	342	0	0	0	0	0	0	0	0	0	0	0	0	342
20:00	245	0	0	0	0	0	0	0	0	0	0	0	0	245
21:00	127	0	0	0	0	0	0	0	0	0	0	0	0	127
22:00	52	0	0	0	0	0	0	0	0	0	0	0	0	52
23:00	26	0	0	0	0	0	0	0	0	0	0	0	0	26
Total	5726	19	2	0	0	0	0	0	0	0	0	0	0	5747
Percent	99.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	01:00	04:00											11:00
Vol.	511	2	1											513
PM Peak	12:00	12:00											12:00	
Vol.	581	2											583	



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	12	1	0	0	0	0	0	0	0	0	0	0	0	13
01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	7	1	0	0	0	0	0	0	0	0	0	0	0	8
03:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
04:00	14	0	0	0	0	0	0	0	0	0	0	0	0	14
05:00	27	0	1	0	0	0	0	0	0	0	0	0	0	28
06:00	190	3	1	0	0	0	0	0	0	0	0	0	0	194
07:00	294	4	0	0	0	0	0	0	0	0	0	0	0	298
08:00	262	8	0	0	0	0	0	0	0	0	0	0	0	270
09:00	213	7	0	0	0	0	0	0	0	0	0	0	0	220
10:00	272	6	0	0	0	0	0	0	0	0	0	0	0	278
11:00	357	7	1	0	0	0	0	0	0	0	0	0	0	365
12 PM	344	4	1	0	0	0	0	0	0	0	0	0	0	349
13:00	361	6	0	0	0	0	0	0	0	0	0	0	0	367
14:00	353	8	0	0	0	0	0	0	0	0	0	0	0	361
15:00	329	6	0	0	0	0	0	0	0	0	0	0	0	335
16:00	373	1	0	0	0	0	0	0	0	0	0	0	0	374
17:00	413	6	0	0	0	0	0	0	0	0	0	0	0	419
18:00	352	1	0	0	0	0	0	0	0	0	0	0	0	353
19:00	285	0	0	0	0	0	0	0	0	0	0	0	0	285
20:00	214	1	0	0	0	0	0	0	0	0	0	0	0	215
21:00	133	0	0	0	0	0	0	0	0	0	0	0	0	133
22:00	61	0	0	0	0	0	0	0	0	0	0	0	0	61
23:00	20	0	0	0	0	0	0	0	0	0	0	0	0	20
Total	4891	70	4	0	0	0	0	0	0	0	0	0	0	4965
Percent	98.5%	1.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	05:00											11:00
Vol.	357	8	1											365
PM Peak	17:00	14:00	12:00											17:00
Vol.	413	8	1											419





Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/1														
7	12	2	0	0	0	0	0	0	0	0	0	0	0	14
01:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
02:00	7	1	0	0	0	0	0	0	0	0	0	0	0	8
03:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
04:00	10	0	0	0	0	0	0	0	0	0	0	0	0	10
05:00	25	0	0	0	0	0	0	0	0	0	0	0	0	25
06:00	235	5	2	0	0	0	0	0	0	0	0	0	0	242
07:00	325	5	0	0	0	0	0	0	0	0	0	0	0	330
08:00	288	5	0	0	0	0	0	0	0	0	0	0	0	293
09:00	200	10	2	0	0	0	0	0	0	0	0	0	0	212
10:00	237	9	1	0	0	0	0	0	0	0	0	0	0	247
11:00	296	8	0	0	0	0	0	0	0	0	0	0	0	304
12 PM	383	3	1	0	0	0	0	0	0	0	0	0	0	387
13:00	334	6	0	0	0	0	0	0	0	0	0	0	0	340
14:00	326	9	1	0	0	0	0	0	0	0	0	0	0	336
15:00	321	3	0	0	0	0	0	0	0	0	0	0	0	324
16:00	362	3	3	0	0	0	0	0	0	0	0	0	0	368
17:00	353	4	0	0	0	0	0	0	0	0	0	0	0	357
18:00	371	2	0	0	0	0	0	0	0	0	0	0	0	373
19:00	299	0	0	0	0	0	0	0	0	0	0	0	0	299
20:00	194	0	0	0	0	0	0	0	0	0	0	0	0	194
21:00	148	1	0	0	0	0	0	0	0	0	0	0	0	149
22:00	59	1	0	0	0	0	0	0	0	0	0	0	0	60
23:00	24	0	0	0	0	0	0	0	0	0	0	0	0	24
Total	4816	77	10	0	0	0	0	0	0	0	0	0	0	4903
Percent	98.2%	1.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	09:00	06:00											07:00
Vol.	325	10	2											330
PM Peak	12:00	14:00	16:00											12:00
Vol.	383	9	3											387



Page 8

175607 E Class  
Site Code: 13796.00

[illegible]



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/1														
7	25	2	0	0	0	0	0	0	0	0	0	0	0	27
01:00	11	0	1	0	0	0	0	0	0	0	0	0	0	12
02:00	6	0	2	0	0	0	0	0	0	0	0	0	0	8
03:00	9	1	1	0	0	0	0	0	0	0	0	0	0	11
04:00	7	0	4	0	0	0	0	0	0	0	0	0	0	11
05:00	20	8	1	0	0	0	0	0	0	0	0	0	0	29
06:00	28	3	3	0	0	0	0	0	0	0	0	0	0	34
07:00	75	6	0	0	0	0	0	0	0	0	0	0	0	81
08:00	153	3	1	0	0	0	0	0	0	0	0	0	0	157
09:00	167	7	2	0	0	0	0	0	0	0	0	0	0	176
10:00	245	3	3	0	0	0	0	0	0	0	0	0	0	251
11:00	345	10	3	0	0	0	0	0	0	0	0	0	0	358
12 PM	464	10	1	0	0	0	0	0	0	0	0	0	0	475
13:00	458	7	2	0	0	0	0	0	0	0	0	0	0	467
14:00	571	10	7	0	0	0	0	0	0	0	0	0	0	588
15:00	584	5	1	0	0	0	0	0	0	0	0	0	0	590
16:00	666	8	2	0	0	0	0	0	0	0	0	0	0	676
17:00	685	2	2	0	0	0	0	0	0	0	0	0	0	689
18:00	615	2	3	0	0	0	0	0	0	0	0	0	0	620
19:00	524	1	5	0	0	0	0	0	0	0	0	0	0	530
20:00	386	2	3	0	0	0	0	0	0	0	0	0	0	391
21:00	302	1	0	0	0	0	0	0	0	0	0	0	0	303
22:00	154	2	2	0	0	0	0	0	0	0	0	0	0	158
23:00	55	1	0	0	0	0	0	0	0	0	0	0	0	56
Total	6555	94	49	0	0	0	0	0	0	0	0	0	0	6698
Percent	97.9%	1.4%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	04:00											11:00
Vol.	345	10	4											358
PM Peak	17:00	12:00	14:00											17:00
Vol.	685	10	7											689



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17	30	0	1	0	0	0	0	0	0	0	0	0	0	31
01:00	15	0	1	0	0	0	0	0	0	0	0	0	0	16
02:00	7	1	2	0	0	0	0	0	0	0	0	0	0	10
03:00	2	0	1	0	0	0	0	0	0	0	0	0	0	3
04:00	10	0	3	0	0	0	0	0	0	0	0	0	0	13
05:00	17	0	7	0	0	0	0	0	0	0	0	0	0	24
06:00	34	1	2	0	0	0	0	0	0	0	0	0	0	37
07:00	93	5	1	0	0	0	0	0	0	0	0	0	0	99
08:00	171	1	2	0	0	0	0	0	0	0	0	0	0	174
09:00	210	5	1	0	0	0	0	0	0	0	0	0	0	216
10:00	323	1	1	0	0	0	0	0	0	0	0	0	0	325
11:00	457	7	3	0	0	0	0	0	0	0	0	0	0	467
12 PM	572	11	1	0	0	0	0	0	0	0	0	0	0	584
13:00	566	8	4	0	0	0	0	0	0	0	0	0	0	578
14:00	572	7	5	0	0	0	0	0	0	0	0	0	0	584
15:00	703	8	5	0	0	0	0	0	0	0	0	0	0	716
16:00	652	3	2	0	0	0	0	0	0	0	0	0	0	657
17:00	705	5	0	0	0	0	0	0	0	0	0	0	0	710
18:00	577	6	1	0	0	0	0	0	0	0	0	0	0	584
19:00	484	1	1	0	0	0	0	0	0	0	0	0	0	486
20:00	336	1	1	0	0	0	0	0	0	0	0	0	0	338
21:00	273	1	0	0	0	0	0	0	0	0	0	0	0	274
22:00	164	0	0	0	0	0	0	0	0	0	0	0	0	164
23:00	71	0	0	0	0	0	0	0	0	0	0	0	0	71
Total	7044	72	45	0	0	0	0	0	0	0	0	0	0	7161
Percent	98.4%	1.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	05:00											11:00
Vol.	457	7	7											467
PM Peak	17:00	12:00	14:00											15:00
Vol.	705	11	5											716



175607 E Class  
Site Code: 13796.00

Tomasello Drive  
south of Winthrop Avenue (Rt 145)  
City, State: Revere, MA  
Client: VHB/ A. Berthaume  
NB

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	31	0	0	0	0	0	0	0	0	0	0	0	0	31
01:00	14	0	0	0	0	0	0	0	0	0	0	0	0	14
02:00	20	1	1	0	0	0	0	0	0	0	0	0	0	22
03:00	10	1	1	0	0	0	0	0	0	0	0	0	0	12
04:00	8	1	4	0	0	0	0	0	0	0	0	0	0	13
05:00	9	0	4	0	0	0	0	0	0	0	0	0	0	13
06:00	14	3	2	0	0	0	0	0	0	0	0	0	0	19
07:00	65	6	0	0	0	0	0	0	0	0	0	0	0	71
08:00	134	6	3	0	0	0	0	0	0	0	0	0	0	143
09:00	240	0	0	0	0	0	0	0	0	0	0	0	0	240
10:00	406	5	0	0	0	0	0	0	0	0	0	0	0	411
11:00	597	4	1	0	0	0	0	0	0	0	0	0	0	602
12 PM	709	8	0	0	0	0	0	0	0	0	0	0	0	717
13:00	767	2	2	0	0	0	0	0	0	0	0	0	0	771
14:00	834	2	1	0	0	0	0	0	0	0	0	0	0	837
15:00	876	3	2	0	0	0	0	0	0	0	0	0	0	881
16:00	839	5	2	0	0	0	0	0	0	0	0	0	0	846
17:00	817	4	2	0	0	0	0	0	0	0	0	0	0	823
18:00	582	1	1	0	0	0	0	0	0	0	0	0	0	584
19:00	813	1	0	0	0	0	0	0	0	0	0	0	0	814
20:00	493	1	0	0	0	0	0	0	0	0	0	0	0	494
21:00	372	1	1	0	0	0	0	0	0	0	0	0	0	374
22:00	184	2	0	0	0	0	0	0	0	0	0	0	0	186
23:00	75	0	0	0	0	0	0	0	0	0	0	0	0	75
Total	8909	57	27	0	0	0	0	0	0	0	0	0	0	8993
Percent	99.1%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	07:00	04:00											11:00
Vol.	597	6	4											602
PM Peak	15:00	12:00	13:00											15:00
Vol.	876	8	2											881



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/17														
7:00	49	1	0	0	0	0	0	0	0	0	0	0	0	50
01:00	17	0	0	0	0	0	0	0	0	0	0	0	0	17
02:00	27	0	0	0	0	0	0	0	0	0	0	0	0	27
03:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6
04:00	6	0	1	0	0	0	0	0	0	0	0	0	0	7
05:00	6	0	1	0	0	0	0	0	0	0	0	0	0	7
06:00	16	1	0	0	0	0	0	0	0	0	0	0	0	17
07:00	55	1	0	0	0	0	0	0	0	0	0	0	0	56
08:00	150	0	0	0	0	0	0	0	0	0	0	0	0	150
09:00	241	1	0	0	0	0	0	0	0	0	0	0	0	242
10:00	338	3	0	0	0	0	0	0	0	0	0	0	0	341
11:00	475	1	0	0	0	0	0	0	0	0	0	0	0	476
12 PM	601	3	0	0	0	0	0	0	0	0	0	0	0	604
13:00	604	2	1	0	0	0	0	0	0	0	0	0	0	607
14:00	696	1	2	0	0	0	0	0	0	0	0	0	0	699
15:00	667	1	2	0	0	0	0	0	0	0	0	0	0	670
16:00	627	0	1	0	0	0	0	0	0	0	0	0	0	628
17:00	603	1	0	0	0	0	0	0	0	0	0	0	0	604
18:00	517	0	0	0	0	0	0	0	0	0	0	0	0	517
19:00	473	1	0	0	0	0	0	0	0	0	0	0	0	474
20:00	425	0	0	0	0	0	0	0	0	0	0	0	0	425
21:00	250	0	0	0	0	0	0	0	0	0	0	0	0	250
22:00	111	0	0	0	0	0	0	0	0	0	0	0	0	111
23:00	65	0	0	0	0	0	0	0	0	0	0	0	0	65
Total	7025	17	8	0	0	0	0	0	0	0	0	0	0	7050
Percent	99.6%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	04:00											11:00
Vol.	475	3	1											476
PM Peak	14:00	12:00	14:00											14:00
Vol.	696	3	2											699



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17	22	0	1	0	0	0	0	0	0	0	0	0	0	23
01:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
02:00	4	1	2	0	0	0	0	0	0	0	0	0	0	7
03:00	1	1	2	0	0	0	0	0	0	0	0	0	0	4
04:00	7	0	4	0	0	0	0	0	0	0	0	0	0	11
05:00	14	0	0	0	0	0	0	0	0	0	0	0	0	14
06:00	26	3	2	0	0	0	0	0	0	0	0	0	0	31
07:00	85	2	0	0	0	0	0	0	0	0	0	0	0	87
08:00	124	6	0	0	0	0	0	0	0	0	0	0	0	130
09:00	175	4	2	0	0	0	0	0	0	0	0	0	0	181
10:00	249	6	0	0	0	0	0	0	0	0	0	0	0	255
11:00	367	10	2	0	0	0	0	0	0	0	0	0	0	379
12 PM	415	7	1	0	0	0	0	0	0	0	0	0	0	423
13:00	464	5	3	0	0	0	0	0	0	0	0	0	0	472
14:00	466	10	9	0	0	0	0	0	0	0	0	0	0	485
15:00	589	8	1	0	0	0	0	0	0	0	0	0	0	598
16:00	600	5	1	0	0	0	0	0	0	0	0	0	0	606
17:00	697	5	1	0	0	0	0	0	0	0	0	0	0	703
18:00	588	3	1	0	0	0	0	0	0	0	0	0	0	592
19:00	494	3	5	0	0	0	0	0	0	0	0	0	0	502
20:00	316	1	1	0	0	0	0	0	0	0	0	0	0	318
21:00	267	0	0	0	0	0	0	0	0	0	0	0	0	267
22:00	142	1	0	0	0	0	0	0	0	0	0	0	0	143
23:00	61	0	0	0	0	0	0	0	0	0	0	0	0	61
Total	6181	81	38	0	0	0	0	0	0	0	0	0	0	6300
Percent	98.1%	1.3%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	04:00											11:00
Vol.	367	10	4											379
PM Peak	17:00	14:00	14:00											17:00
Vol.	697	10	9											703



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/1														
7	18	0	0	0	0	0	0	0	0	0	0	0	0	18
01:00	9	0	2	0	0	0	0	0	0	0	0	0	0	11
02:00	4	0	2	0	0	0	0	0	0	0	0	0	0	6
03:00	5	0	1	0	0	0	0	0	0	0	0	0	0	6
04:00	5	1	2	0	0	0	0	0	0	0	0	0	0	8
05:00	12	0	8	0	0	0	0	0	0	0	0	0	0	20
06:00	42	1	2	0	0	0	0	0	0	0	0	0	0	45
07:00	77	4	1	0	0	0	0	0	0	0	0	0	0	82
08:00	151	4	0	0	0	0	0	0	0	0	0	0	0	155
09:00	183	8	0	0	0	0	0	0	0	0	0	0	0	191
10:00	244	8	4	0	0	0	0	0	0	0	0	0	0	256
11:00	319	7	4	0	0	0	0	0	0	0	0	0	0	330
12 PM	411	6	1	0	0	0	0	0	0	0	0	0	0	418
13:00	455	9	2	0	0	0	0	0	0	0	0	0	0	466
14:00	457	7	6	0	0	0	0	0	0	0	0	0	0	470
15:00	561	7	2	0	0	0	0	0	0	0	0	0	0	570
16:00	590	5	0	0	0	0	0	0	0	0	0	0	0	595
17:00	700	3	2	0	0	0	0	0	0	0	0	0	0	705
18:00	552	5	2	0	0	0	0	0	0	0	0	0	0	559
19:00	455	1	4	0	0	0	0	0	0	0	0	0	0	460
20:00	339	2	2	0	0	0	0	0	0	0	0	0	0	343
21:00	288	1	0	0	0	0	0	0	0	0	0	0	0	289
22:00	132	1	0	0	0	0	0	0	0	0	0	0	0	133
23:00	59	1	0	0	0	0	0	0	0	0	0	0	0	60
Total	6068	81	47	0	0	0	0	0	0	0	0	0	0	6196
Percent	97.9%	1.3%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	05:00											11:00
Vol.	319	8	8											330
PM Peak	17:00	13:00	14:00											17:00
Vol.	700	9	6											705





PRECISION  
D A T A  
INDUSTRIES, LLC  
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Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Tomasello Drive  
south of Winthrop Avenue (Rt 145)  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 E Volume  
Site Code: 13796.00

Start Time	5/3/2017		5/4/2017		5/5/2017		5/6/2017		5/7/2017		5/8/2017		5/9/2017		Week Average	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	7	22	12	27	19	31	8	31	15	50	13	23	14	18	13	29
01:00	11	14	9	12	5	16	8	14	15	17	1	8	3	11	7	13
02:00	22	8	15	8	17	10	14	22	12	27	8	7	8	6	14	13
03:00	7	10	7	11	5	3	4	12	5	6	4	4	4	6	5	7
04:00	12	10	15	11	13	13	14	13	11	7	14	11	10	8	13	10
05:00	25	19	21	29	27	24	14	13	10	7	28	14	25	20	21	18
06:00	199	37	216	34	170	37	44	19	38	17	194	31	242	45	158	31
07:00	315	84	322	81	305	99	107	71	100	56	298	87	330	82	254	80
08:00	289	132	283	157	306	174	184	143	163	150	270	130	293	155	255	149
09:00	248	218	198	176	274	216	338	240	279	242	220	181	212	191	253	209
10:00	283	276	261	251	338	325	470	411	393	341	278	255	247	256	324	302
11:00	341	376	365	358	491	467	651	602	513	476	365	379	304	330	433	427
12:00 PM	424	428	437	475	501	584	712	717	583	604	349	423	387	418	485	521
01:00	401	496	381	467	443	578	723	771	581	607	367	472	340	466	462	551
02:00	347	522	360	588	449	584	673	837	567	699	361	485	336	470	442	598
03:00	330	558	396	590	422	716	628	881	478	670	335	598	324	570	416	655
04:00	331	585	371	676	370	657	610	846	441	628	374	606	368	595	409	656
05:00	338	646	381	689	354	710	536	823	367	604	419	703	357	705	393	697
06:00	349	573	375	620	339	584	392	584	384	517	353	592	373	559	366	576
07:00	311	463	337	530	297	486	376	814	342	474	285	502	299	460	321	533
08:00	220	387	215	391	209	338	273	494	245	425	215	318	194	343	224	385
09:00	132	282	133	303	134	274	162	374	127	250	133	267	149	289	139	291
10:00	78	167	68	158	63	164	70	186	52	111	61	143	60	133	65	152
11:00	22	66	18	56	23	71	18	75	26	65	20	61	24	60	22	65
Total	5042	6379	5196	6698	5574	7161	7029	8993	5747	7050	4965	6300	4903	6196	5494	6968
Day	11421		11894		12735		16022		12797		11265		11099		12462	
AM Peak	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	07:00	11:00	11:00	11:00
Vol.	341	376	365	358	491	467	651	602	513	476	365	379	330	330	433	427
PM Peak	12:00	17:00	12:00	17:00	12:00	15:00	13:00	15:00	12:00	14:00	17:00	17:00	12:00	17:00	12:00	17:00
Vol.	424	646	437	689	501	716	723	881	583	699	419	703	387	705	485	697

Comb. Total	11421	11894	12735	16022	12797	11265	11099	12462
ADT	ADT 12,462	AADT 12,462						



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
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Tomasello Drive  
south of Winthrop Avenue (Rt 145)  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 E Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/3/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Wed	
12:00	3	92	8	108	11	200		
12:15	1	103	8	106	9	209		
12:30	2	117	5	108	7	225		
12:45	1	112	1	106	2	218	852	
01:00	2	107	6	126	8	233		
01:15	3	100	2	120	5	220		
01:30	2	103	3	128	5	231		
01:45	4	91	3	122	7	213	897	
02:00	6	74	1	136	7	210		
02:15	1	82	2	114	3	196		
02:30	4	101	2	134	6	235		
02:45	11	90	3	138	14	228	869	
03:00	3	76	3	131	6	207		
03:15	1	75	1	135	2	210		
03:30	2	85	3	161	5	246		
03:45	1	94	3	131	4	225	888	
04:00	2	75	2	147	4	222		
04:15	3	81	1	149	4	230		
04:30	3	81	0	147	3	228		
04:45	4	94	7	142	11	236	916	
05:00	4	88	6	141	10	229		
05:15	1	89	2	158	3	247		
05:30	7	90	4	159	11	249		
05:45	13	71	7	188	20	259	984	
06:00	23	104	10	156	33	260		
06:15	42	91	8	153	50	244		
06:30	58	81	9	116	67	197		
06:45	76	73	10	148	86	221	922	
07:00	84	91	16	137	100	228		
07:15	74	79	22	126	96	205		
07:30	80	77	19	94	99	171		
07:45	77	64	27	106	104	170	774	
08:00	73	70	21	96	94	166		
08:15	84	66	38	106	122	172		
08:30	65	42	38	98	103	140		
08:45	67	42	35	87	102	129	607	
09:00	55	48	55	74	110	122		
09:15	69	36	50	65	119	101		
09:30	54	27	65	85	119	112		
09:45	70	21	48	58	118	79	414	
10:00	77	32	53	46	130	78		
10:15	56	21	76	47	132	68		
10:30	85	16	78	43	163	59		
10:45	65	9	69	31	134	40	245	
11:00	72	8	88	25	160	33		
11:15	83	3	85	17	168	20		
11:30	97	6	103	14	200	20		
11:45	89	5	100	10	189	15	88	
Total	1759	3283	1206	5173	2965	8456		
Percent	59.3%	38.8%	40.7%	61.2%				
Day Total		5042		6379		11421		
Peak	11:00	-	00:15	-	11:00	-	05:15	-
Vol.	341	-	439	-	376	-	1015	-
P.H.F.	0.879	-	0.938	-	0.913	-	0.879	-



PRECISION  
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Tomasello Drive  
south of Winthrop Avenue (Rt 145)  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 E Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/4/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Thu	
12:00	2	101	12	98	14	199		
12:15	5	115	4	132	9	247		
12:30	4	112	6	116	10	228		
12:45	1	109	5	129	6	238	912	
01:00	3	107	2	113	5	220		
01:15	2	106	2	114	4	220		
01:30	1	88	3	117	4	205		
01:45	3	80	5	123	8	203	848	
02:00	1	86	0	149	1	235		
02:15	3	100	1	143	4	243		
02:30	2	67	3	161	5	228		
02:45	9	107	4	135	13	242	948	
03:00	3	98	4	138	7	236		
03:15	1	103	4	146	5	249		
03:30	2	95	1	159	3	254		
03:45	1	100	2	147	3	247	986	
04:00	2	88	2	151	4	239		
04:15	1	92	3	167	4	259		
04:30	5	104	5	179	10	283		
04:45	7	87	1	179	8	266	1047	
05:00	1	95	5	172	6	267		
05:15	0	88	8	171	8	259		
05:30	8	92	6	180	14	272		
05:45	12	106	10	166	22	272	1070	
06:00	21	100	9	165	30	265		
06:15	41	91	2	158	43	249		
06:30	64	97	7	158	71	255		
06:45	90	87	16	139	106	226	995	
07:00	96	91	20	122	116	213		
07:15	78	95	21	146	99	241		
07:30	73	90	22	127	95	217		
07:45	75	61	18	135	93	196	867	
08:00	84	62	35	134	119	196		
08:15	76	61	42	97	118	158		
08:30	77	55	38	86	115	141		
08:45	46	37	42	74	88	111	606	
09:00	43	44	51	99	94	143		
09:15	45	29	41	75	86	104		
09:30	51	36	39	69	90	105		
09:45	59	24	45	60	104	84	436	
10:00	58	24	49	53	107	77		
10:15	75	17	57	47	132	64		
10:30	49	16	61	27	110	43		
10:45	79	11	84	31	163	42	226	
11:00	98	7	77	21	175	28		
11:15	79	5	93	18	172	23		
11:30	98	4	84	11	182	15		
11:45	90	2	104	6	194	8	74	
Total	1724	3472	1155	5543	2879	9015		
Percent	59.9%	38.5%	40.1%	61.5%				
Day Total		5196		6698		11894		
Peak	11:00	-	00:15	-	11:00	-	04:15	-
Vol.	365	-	443	-	358	-	1075	-
P.H.F.	0.931	-	0.963	-	0.861	-	0.950	-



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175607 E Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/5/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	7	134	11	132	18	266		
12:15	6	127	11	162	17	289		
12:30	4	118	3	139	7	257		
12:45	2	122	6	151	8	273	1085	
01:00	0	126	3	138	3	264		
01:15	1	109	3	131	4	240		
01:30	3	104	4	156	7	260		
01:45	1	104	6	153	7	257	1021	
02:00	0	102	1	155	1	257		
02:15	3	106	4	159	7	265		
02:30	3	98	4	138	7	236		
02:45	11	143	1	132	12	275	1033	
03:00	2	106	0	174	2	280		
03:15	1	127	1	184	2	311		
03:30	1	101	1	180	2	281		
03:45	1	88	1	178	2	266	1138	
04:00	4	108	1	158	5	266		
04:15	2	94	3	161	5	255		
04:30	3	74	2	180	5	254		
04:45	4	94	7	158	11	252	1027	
05:00	2	75	9	172	11	247		
05:15	1	86	6	187	7	273		
05:30	10	104	4	192	14	296		
05:45	14	89	5	159	19	248	1064	
06:00	10	106	10	149	20	255		
06:15	39	82	8	167	47	249		
06:30	57	83	6	130	63	213		
06:45	64	68	13	138	77	206	923	
07:00	85	76	15	151	100	227		
07:15	78	71	24	112	102	183		
07:30	61	84	38	112	99	196		
07:45	81	66	22	111	103	177	783	
08:00	78	67	36	101	114	168		
08:15	92	53	35	89	127	142		
08:30	69	47	58	94	127	141		
08:45	67	42	45	54	112	96	547	
09:00	64	38	53	88	117	126		
09:15	61	32	56	70	117	102		
09:30	61	37	46	64	107	101		
09:45	88	27	61	52	149	79	408	
10:00	81	12	58	48	139	60		
10:15	81	24	89	48	170	72		
10:30	94	14	76	41	170	55		
10:45	82	13	102	27	184	40	227	
11:00	112	4	110	22	222	26		
11:15	115	6	107	17	222	23		
11:30	131	8	127	18	258	26		
11:45	133	5	123	14	256	19	94	
Total	1970	3604	1415	5746	3385	9350		
Percent	58.2%	38.5%	41.8%	61.5%				
Day Total		5574		7161		12735		
Peak	11:00	-	12:00	-	11:00	-	02:45	-
Vol.	491	-	501	-	467	-	1147	-
P.H.F.	0.923	-	0.935	-	0.919	-	0.922	-



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Tomasello Drive  
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City, State: Revere, MA  
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175607 E Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/6/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sat	
12:00	3	180	11	162	14	342		
12:15	3	172	7	167	10	339		
12:30	2	170	10	200	12	370		
12:45	0	190	3	188	3	378	1429	
01:00	2	189	4	172	6	361		
01:15	2	175	6	174	8	349		
01:30	2	158	2	205	4	363		
01:45	2	201	2	220	4	421	1494	
02:00	3	157	5	214	8	371		
02:15	3	201	6	235	9	436		
02:30	4	167	4	178	8	345		
02:45	4	148	7	210	11	358	1510	
03:00	1	169	4	225	5	394		
03:15	2	141	6	209	8	350		
03:30	1	179	2	230	3	409		
03:45	0	139	0	217	0	356	1509	
04:00	2	147	0	207	2	354		
04:15	4	153	3	225	7	378		
04:30	4	166	5	189	9	355		
04:45	4	144	5	225	9	369	1456	
05:00	2	145	3	201	5	346		
05:15	1	122	4	183	5	305		
05:30	5	131	0	223	5	354		
05:45	6	138	6	216	12	354	1359	
06:00	3	109	2	198	5	307		
06:15	7	95	1	143	8	238		
06:30	10	107	6	116	16	223		
06:45	24	81	10	127	34	208	976	
07:00	27	90	10	266	37	356		
07:15	25	101	20	246	45	347		
07:30	24	89	15	171	39	260		
07:45	31	96	26	131	57	227	1190	
08:00	45	87	27	137	72	224		
08:15	50	77	29	137	79	214		
08:30	42	56	36	120	78	176		
08:45	47	53	51	100	98	153	767	
09:00	69	61	40	110	109	171		
09:15	79	40	62	87	141	127		
09:30	78	34	56	94	134	128		
09:45	112	27	82	83	194	110	536	
10:00	104	23	78	55	182	78		
10:15	105	27	110	42	215	69		
10:30	120	8	107	51	227	59		
10:45	141	12	116	38	257	50	256	
11:00	153	5	150	26	303	31		
11:15	134	6	141	20	275	26		
11:30	190	3	133	16	323	19		
11:45	174	4	178	13	352	17	93	
Total	1856	5173	1591	7402	3447	12575		
Percent	53.8%	41.1%	46.2%	58.9%				
Day Total		7029		8993		16022		
Peak	11:00	-	01:45	-	11:00	-	01:30	-
Vol.	651	-	726	-	602	-	1591	-
P.H.F.	0.857	-	0.903	-	0.846	-	0.912	-



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175607 E Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/7/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sun	
12:00	3	142	6	151	9	293		
12:15	5	152	21	166	26	318		
12:30	4	145	15	140	19	285		
12:45	3	144	8	147	11	291	1187	
01:00	4	152	9	154	13	306		
01:15	4	147	3	138	7	285		
01:30	1	131	2	147	3	278		
01:45	6	151	3	168	9	319	1188	
02:00	2	137	12	182	14	319		
02:15	1	140	4	175	5	315		
02:30	4	150	7	166	11	316		
02:45	5	140	4	176	9	316	1266	
03:00	3	123	3	162	6	285		
03:15	1	118	0	164	1	282		
03:30	0	124	1	174	1	298		
03:45	1	113	2	170	3	283	1148	
04:00	3	113	2	150	5	263		
04:15	1	103	2	177	3	280		
04:30	2	119	0	156	2	275		
04:45	5	106	3	145	8	251	1069	
05:00	2	106	1	131	3	237		
05:15	2	93	2	165	4	258		
05:30	1	87	0	152	1	239		
05:45	5	81	4	156	9	237	971	
06:00	5	109	1	129	6	238		
06:15	4	87	3	141	7	228		
06:30	6	90	8	135	14	225		
06:45	23	98	5	112	28	210	901	
07:00	20	81	13	115	33	196		
07:15	17	84	13	114	30	198		
07:30	22	92	14	119	36	211		
07:45	41	85	16	126	57	211	816	
08:00	42	72	26	110	68	182		
08:15	35	65	38	123	73	188		
08:30	50	60	40	86	90	146		
08:45	36	48	46	106	82	154	670	
09:00	47	40	38	93	85	133		
09:15	70	27	64	65	134	92		
09:30	78	28	56	52	134	80		
09:45	84	32	84	40	168	72	377	
10:00	95	19	83	44	178	63		
10:15	85	12	79	33	164	45		
10:30	90	13	97	20	187	33		
10:45	123	8	82	14	205	22	163	
11:00	121	10	106	19	227	29		
11:15	119	8	115	16	234	24		
11:30	133	6	120	18	253	24		
11:45	140	2	135	12	275	14	91	
Total	1554	4193	1396	5654	2950	9847		
Percent	52.7%	42.6%	47.3%	57.4%				
Day Total		5747		7050		12797		
Peak	11:00	-	00:15	-	11:00	-	01:45	-
Vol.	513	-	593	-	476	-	1269	-
P.H.F.	0.916	-	0.975	-	0.881	-	0.995	-



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175607 E Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/8/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Mon	
12:00	4	96	7	110	11	206		
12:15	1	84	7	96	8	180		
12:30	4	90	7	106	11	196		
12:45	4	79	2	111	6	190	772	
01:00	0	103	4	94	4	197		
01:15	0	92	1	133	1	225		
01:30	0	82	1	123	1	205		
01:45	1	90	2	122	3	212	839	
02:00	1	87	4	116	5	203		
02:15	1	91	1	95	2	186		
02:30	0	79	1	130	1	209		
02:45	6	104	1	144	7	248	846	
03:00	2	79	1	139	3	218		
03:15	1	99	1	138	2	237		
03:30	1	76	1	159	2	235		
03:45	0	81	1	162	1	243	933	
04:00	1	96	1	158	2	254		
04:15	2	82	2	138	4	220		
04:30	6	97	1	155	7	252		
04:45	5	99	7	155	12	254	980	
05:00	2	100	1	185	3	285		
05:15	1	107	2	185	3	292		
05:30	11	105	3	162	14	267		
05:45	14	107	8	171	22	278	1122	
06:00	13	94	11	167	24	261		
06:15	35	94	3	162	38	256		
06:30	60	70	7	137	67	207		
06:45	86	95	10	126	96	221	945	
07:00	65	76	12	128	77	204		
07:15	80	85	23	144	103	229		
07:30	73	68	26	118	99	186		
07:45	80	56	26	112	106	168	787	
08:00	80	60	28	83	108	143		
08:15	72	61	34	72	106	133		
08:30	59	41	30	86	89	127		
08:45	59	53	38	77	97	130	533	
09:00	55	41	34	80	89	121		
09:15	52	35	55	79	107	114		
09:30	55	34	49	55	104	89		
09:45	58	23	43	53	101	76	400	
10:00	49	23	55	40	104	63		
10:15	74	15	79	47	153	62		
10:30	80	13	52	29	132	42		
10:45	75	10	69	27	144	37	204	
11:00	101	9	95	19	196	28		
11:15	75	5	80	21	155	26		
11:30	88	3	112	14	200	17		
11:45	101	3	92	7	193	10	81	
Total	1693	3272	1130	5170	2823	8442		
Percent	60.0%	38.8%	40.0%	61.2%				
Day Total		4965		6300		11265		
Peak	11:00	-	05:00	-	11:00	-	05:00	-
Vol.	365	-	419	-	379	-	703	-
P.H.F.	0.903	-	0.979	-	0.846	-	0.950	-



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Site Code: 13796.00

Start	SB		NB		Combin		5/9/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Tue	
12:00	5	101	4	97	9	198		
12:15	2	102	1	101	3	203		
12:30	4	116	5	105	9	221		
12:45	3	14	8	115	11	183	805	
01:00	1	91	5	109	6	200		
01:15	0	81	4	124	4	205		
01:30	2	103	2	112	4	215		
01:45	0	3	0	121	0	186	806	
02:00	3	79	1	131	4	210		
02:15	0	83	2	110	2	193		
02:30	3	93	2	111	5	204		
02:45	2	8	1	118	3	199	806	
03:00	2	81	0	159	2	240		
03:15	0	97	1	129	1	226		
03:30	1	75	3	137	4	212		
03:45	1	4	2	145	3	216	894	
04:00	3	91	1	139	4	230		
04:15	2	96	1	144	3	240		
04:30	2	77	3	157	5	234		
04:45	3	10	3	155	6	259	963	
05:00	3	79	7	189	10	268		
05:15	1	89	8	175	9	264		
05:30	5	95	1	158	6	253		
05:45	16	25	4	183	20	277	1062	
06:00	24	101	11	142	35	243		
06:15	42	108	7	137	49	245		
06:30	83	86	17	138	100	224		
06:45	93	242	10	142	103	220	932	
07:00	89	80	16	139	105	219		
07:15	77	69	17	124	94	193		
07:30	88	74	27	111	115	185		
07:45	76	330	22	86	98	162	759	
08:00	75	51	31	93	106	144		
08:15	78	54	35	79	113	133		
08:30	81	46	45	78	126	124		
08:45	59	293	44	93	103	136	537	
09:00	45	60	47	101	92	161		
09:15	53	42	42	64	95	106		
09:30	60	28	65	80	125	108		
09:45	54	212	37	44	91	63	438	
10:00	62	21	61	46	123	67		
10:15	47	17	63	28	110	45		
10:30	70	13	60	31	130	44		
10:45	68	247	72	28	140	37	193	
11:00	63	7	62	23	125	30		
11:15	75	8	83	18	158	26		
11:30	80	5	102	10	182	15		
11:45	86	304	83	9	169	13	84	
Total	1692	3211	1128	5068	2820	8279		
Percent	60.0%	38.8%	40.0%	61.2%				
Day Total		4903		6196		11099		
Peak	06:45	-	05:30	-	11:00	-	05:00	-
Vol.	347	-	398	-	330	-	1062	-
P.H.F.	0.933	-	0.858	-	0.809	-	0.958	-





Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	11	0	0	0	0	0	0	0	0	0	0	0	0	11
01:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
02:00	10	1	0	0	0	0	0	0	0	0	0	0	0	11
03:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6
04:00	8	1	0	0	0	0	0	0	0	0	0	0	0	9
05:00	13	0	0	0	0	0	0	0	0	0	0	0	0	13
06:00	37	1	0	0	0	0	0	0	0	0	0	0	0	38
07:00	98	0	0	0	0	0	0	0	0	0	0	0	0	98
08:00	156	2	1	0	0	0	0	0	0	0	0	0	0	159
09:00	206	7	0	0	0	0	0	0	0	0	0	0	0	213
10:00	251	7	0	0	0	0	0	0	0	0	0	0	0	258
11:00	305	3	1	0	0	0	0	0	0	0	0	0	0	309
12 PM	375	3	0	0	0	0	0	0	0	0	0	0	0	378
13:00	381	5	1	0	0	0	0	0	0	0	0	0	0	387
14:00	333	9	0	0	0	0	0	0	0	0	0	0	0	342
15:00	331	2	0	0	0	0	0	0	0	0	0	0	0	333
16:00	344	2	0	0	0	0	0	0	0	0	0	0	0	346
17:00	378	1	0	0	0	0	0	0	0	0	0	0	0	379
18:00	405	2	0	0	0	0	0	0	0	0	0	0	0	407
19:00	325	1	0	0	0	325	0	0	0	0	0	0	0	326
20:00	235	2	0	0	0	0	0	0	0	0	0	0	0	237
21:00	147	1	0	0	0	0	0	0	0	0	0	0	0	148
22:00	76	1	0	0	0	0	0	0	0	0	0	0	0	77
23:00	21	1	0	0	0	0	0	0	0	0	0	0	0	22
Total	4456	52	3	0	0	0	0	0	0	0	0	0	0	4511
Percent	98.8%	1.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	08:00											11:00
Vol.	305	7	1											309
PM Peak	18:00	14:00	13:00											18:00
Vol.	405	9	1											407



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175607 F Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/17														
7:00	11	0	0	0	0	0	0	0	0	0	0	0	0	11
01:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6
02:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6
03:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:00	9	0	0	0	0	0	0	0	0	0	0	0	0	9
05:00	14	0	0	0	0	0	0	0	0	0	0	0	0	14
06:00	40	1	0	0	0	0	0	0	0	0	0	0	0	41
07:00	77	0	0	0	0	0	0	0	0	0	0	0	0	77
08:00	170	3	0	0	0	0	0	0	0	0	0	0	0	173
09:00	164	6	1	0	0	0	0	0	0	0	0	0	0	171
10:00	244	4	1	0	0	0	0	0	0	0	0	0	0	249
11:00	335	7	1	0	0	0	0	0	0	0	0	0	0	343
12 PM	383	5	0	0	0	0	0	0	0	0	0	0	0	388
13:00	356	5	0	0	0	0	0	0	0	0	0	0	0	361
14:00	358	4	0	0	0	0	0	0	0	0	0	0	0	362
15:00	384	0	0	0	0	0	0	0	0	0	0	0	0	384
16:00	378	1	0	0	0	0	0	0	0	0	0	0	0	379
17:00	392	1	0	0	0	0	0	0	0	0	0	0	0	393
18:00	397	4	1	0	0	0	0	0	0	0	0	0	0	402
19:00	348	2	0	0	0	0	0	0	0	0	0	0	0	350
20:00	233	0	0	0	0	0	0	0	0	0	0	0	0	233
21:00	152	1	0	0	0	0	0	0	0	0	0	0	0	153
22:00	71	0	0	0	0	0	0	0	0	0	0	0	0	71
23:00	15	1	0	0	0	0	0	0	0	0	0	0	0	16
Total	4546	45	4	0	0	0	0	0	0	0	0	0	0	4595
Percent	98.9%	1.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	09:00											11:00
Vol.	335	7	1											343
PM Peak	18:00	12:00	18:00											18:00
Vol.	397	5	1											402



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175607 F Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	9	1	0	0	0	0	0	0	0	0	0	0	0	10
03:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00	23	0	0	0	0	0	0	0	0	0	0	0	0	23
06:00	34	0	0	0	0	0	0	0	0	0	0	0	0	34
07:00	118	0	0	0	0	0	0	0	0	0	0	0	0	118
08:00	197	4	0	0	0	0	0	0	0	0	0	0	0	201
09:00	229	6	0	0	0	0	0	0	0	0	0	0	0	235
10:00	310	2	0	0	0	0	0	0	0	0	0	0	0	312
11:00	424	8	0	0	0	0	0	0	0	0	0	0	0	432
12 PM	400	2	0	0	0	0	0	0	0	0	0	0	0	402
13:00	385	6	0	0	0	0	0	0	0	0	0	0	0	391
14:00	408	4	1	0	0	0	0	0	0	0	0	0	0	413
15:00	388	5	0	0	0	0	0	0	0	0	0	0	0	393
16:00	369	1	0	0	0	0	0	0	0	0	0	0	0	370
17:00	368	3	0	0	0	0	0	0	0	0	0	0	0	371
18:00	364	1	0	0	0	0	0	0	0	0	0	0	0	365
19:00	288	0	0	0	0	0	0	0	0	0	0	0	0	288
20:00	223	0	0	0	0	0	0	0	0	0	0	0	0	223
21:00	149	1	0	0	0	0	0	0	0	0	0	0	0	150
22:00	71	0	0	0	0	0	0	0	0	0	0	0	0	71
23:00	27	0	0	0	0	0	0	0	0	0	0	0	0	27
Total	4811	44	1	0	0	0	0	0	0	0	0	0	0	4856
Percent	99.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00												11:00
Vol.	424	8												432
PM Peak	14:00	13:00	14:00											14:00
Vol.	408	6	1											413



Furlong Drive  
west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume  
WB

175607 F Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	11	0	0	0	0	0	0	0	0	0	0	0	0	11
01:00	11	0	0	0	0	0	0	0	0	0	0	0	0	11
02:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
03:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	8	1	1	0	0	0	0	0	0	0	0	0	0	10
05:00	11	0	0	0	0	0	0	0	0	0	0	0	0	11
06:00	23	0	0	0	0	0	0	0	0	0	0	0	0	23
07:00	94	1	0	0	0	0	0	0	0	0	0	0	0	95
08:00	160	0	1	0	0	0	0	0	0	0	0	0	0	161
09:00	271	2	0	0	0	0	0	0	0	0	0	0	0	273
10:00	360	5	0	0	0	0	0	0	0	0	0	0	0	365
11:00	456	2	0	0	0	0	0	0	0	0	0	0	0	458
12 PM	494	5	0	0	0	0	0	0	0	0	0	0	0	499
13:00	557	3	0	0	0	0	0	0	0	0	0	0	0	560
14:00	491	2	0	0	0	0	0	0	0	0	0	0	0	493
15:00	488	2	0	0	0	0	0	0	0	0	0	0	0	490
16:00	486	2	0	0	0	0	0	0	0	0	0	0	0	488
17:00	432	0	0	0	0	0	0	0	0	0	0	0	0	432
18:00	359	0	0	0	0	0	0	0	0	0	0	0	0	359
19:00	384	0	0	0	0	0	0	0	0	0	0	0	0	384
20:00	282	1	0	0	0	0	0	0	0	0	0	0	0	283
21:00	187	1	0	0	0	0	0	0	0	0	0	0	0	188
22:00	74	0	0	0	0	0	0	0	0	0	0	0	0	74
23:00	18	0	0	0	0	0	0	0	0	0	0	0	0	18
Total	5665	27	2	0	0	0	0	0	0	0	0	0	0	5694
Percent	99.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	04:00											11:00
Vol.	456	5	1											458
PM Peak	13:00	12:00												13:00
Vol.	557	5												560



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/1														
7	15	0	0	0	0	0	0	0	0	0	0	0	0	15
01:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
02:00	10	0	0	0	0	0	0	0	0	0	0	0	0	10
03:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
04:00	4	1	1	0	0	0	0	0	0	0	0	0	0	6
05:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
06:00	24	0	0	0	0	0	0	0	0	0	0	0	0	24
07:00	96	1	0	0	0	0	0	0	0	0	0	0	0	97
08:00	153	1	0	0	0	0	0	0	0	0	0	0	0	154
09:00	269	1	0	0	0	0	0	0	0	0	0	0	0	270
10:00	364	3	0	0	0	0	0	0	0	0	0	0	0	367
11:00	438	1	0	0	0	0	0	0	0	0	0	0	0	439
12 PM	456	1	0	0	0	0	0	0	0	0	0	0	0	457
13:00	514	2	0	0	0	0	0	0	0	0	0	0	0	516
14:00	561	2	0	0	0	0	0	0	0	0	0	0	0	563
15:00	493	2	0	0	0	0	0	0	0	0	0	0	0	495
16:00	449	0	0	0	0	0	0	0	0	0	0	0	0	449
17:00	405	0	0	0	0	0	0	0	0	0	0	0	0	405
18:00	392	0	0	0	0	0	0	0	0	0	0	0	0	392
19:00	374	2	0	0	0	0	0	0	0	0	0	0	0	376
20:00	275	0	0	0	0	0	0	0	0	0	0	0	0	275
21:00	130	0	0	0	0	0	0	0	0	0	0	0	0	130
22:00	52	0	0	0	0	0	0	0	0	0	0	0	0	52
23:00	25	0	0	0	0	0	0	0	0	0	0	0	0	25
Total	5515	17	1	0	0	0	0	0	0	0	0	0	0	5533
Percent	99.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	04:00											11:00
Vol.	438	3	1											439
PM Peak	14:00	13:00												14:00
Vol.	561	2												563



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175607 F Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17	9	1	0	0	0	0	0	0	0	0	0	0	0	10
01:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
02:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
03:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
05:00	12	0	0	0	0	0	0	0	0	0	0	0	0	12
06:00	31	0	0	0	0	0	0	0	0	0	0	0	0	31
07:00	88	0	0	0	0	0	0	0	0	0	0	0	0	88
08:00	149	2	0	0	0	0	0	0	0	0	0	0	0	151
09:00	194	4	0	0	0	0	0	0	0	0	0	0	0	198
10:00	258	4	0	0	0	0	0	0	0	0	0	0	0	262
11:00	363	4	0	0	0	0	0	0	0	0	0	0	0	367
12 PM	352	4	1	0	0	0	0	0	0	0	0	0	0	357
13:00	370	7	0	0	0	0	0	0	0	0	0	0	0	377
14:00	364	5	0	0	0	0	0	0	0	0	0	0	0	369
15:00	361	5	0	0	0	0	0	0	0	0	0	0	0	366
16:00	392	1	0	0	0	0	0	0	0	0	0	0	0	393
17:00	443	3	0	0	0	0	0	0	0	0	0	0	0	446
18:00	382	1	0	0	0	0	0	0	0	0	0	0	0	383
19:00	305	1	0	0	0	0	0	0	0	0	0	0	0	306
20:00	214	1	0	0	0	0	0	0	0	0	0	0	0	215
21:00	136	0	0	0	0	0	0	0	0	0	0	0	0	136
22:00	63	0	0	0	0	0	0	0	0	0	0	0	0	63
23:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
Total	4520	43	1	0	0	0	0	0	0	0	0	0	0	4564
Percent	99.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00												11:00
Vol.	363	4												367
PM Peak	17:00	13:00	12:00											17:00
Vol.	443	7	1											446



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175607 F Class  
Site Code: 13796.00

[illegible]



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175607 F Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/1														
7	13	0	0	0	0	0	0	0	0	0	0	0	0	13
01:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
02:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2
03:00	2	0	3	0	0	0	0	0	0	0	0	0	0	5
04:00	3	0	7	0	0	0	0	0	0	0	0	0	0	10
05:00	5	6	2	0	0	0	0	0	0	0	0	0	0	13
06:00	15	2	0	0	0	0	0	0	0	0	0	0	0	17
07:00	59	2	1	0	0	0	0	0	0	0	0	0	0	62
08:00	101	4	0	0	0	0	0	0	0	0	0	0	0	105
09:00	163	6	3	0	0	0	0	0	0	0	0	0	0	172
10:00	236	4	0	0	0	0	0	0	0	0	0	0	0	240
11:00	312	7	0	0	0	0	0	0	0	0	0	0	0	319
12 PM	354	5	1	0	0	0	0	0	0	0	0	0	0	360
13:00	411	6	2	0	0	0	0	0	0	0	0	0	0	419
14:00	354	6	7	0	0	0	0	0	0	0	0	0	0	367
15:00	363	1	1	0	0	0	0	0	0	0	0	0	0	365
16:00	360	1	2	0	0	0	0	0	0	0	0	0	0	363
17:00	398	1	1	0	0	0	0	0	0	0	0	0	0	400
18:00	389	2	0	0	0	0	0	0	0	0	0	0	0	391
19:00	358	1	4	0	0	0	0	0	0	0	0	0	0	363
20:00	323	2	1	0	0	0	0	0	0	0	0	0	0	326
21:00	215	4	1	0	0	0	0	0	0	0	0	0	0	220
22:00	121	0	0	0	0	0	0	0	0	0	0	0	0	121
23:00	39	0	0	0	0	0	0	0	0	0	0	0	0	39
Total	4602	61	36	0	0	0	0	0	0	0	0	0	0	4699
Percent	97.9%	1.3%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	04:00											11:00
Vol.	312	7	7											319
PM Peak	13:00	13:00	14:00											13:00
Vol.	411	6	7											419





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175607 F Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/17														
7:00	16	1	0	0	0	0	0	0	0	0	0	0	0	17
01:00	4	1	0	0	0	0	0	0	0	0	0	0	0	5
02:00	1	1	1	0	0	0	0	0	0	0	0	0	0	3
03:00	3	0	1	0	0	0	0	0	0	0	0	0	0	4
04:00	2	2	3	0	0	0	0	0	0	0	0	0	0	7
05:00	6	5	4	0	0	0	0	0	0	0	0	0	0	15
06:00	10	1	0	0	0	0	0	0	0	0	0	0	0	11
07:00	44	1	0	0	0	0	0	0	0	0	0	0	0	45
08:00	132	3	0	0	0	0	0	0	0	0	0	0	0	135
09:00	134	4	0	0	0	0	0	0	0	0	0	0	0	138
10:00	210	1	0	0	0	0	0	0	0	0	0	0	0	211
11:00	281	8	1	0	0	0	0	0	0	0	0	0	0	290
12 PM	362	5	0	0	0	0	0	0	0	0	0	0	0	367
13:00	360	6	0	0	0	0	0	0	0	0	0	0	0	366
14:00	397	6	5	0	0	0	0	0	0	0	0	0	0	408
15:00	395	2	2	0	0	0	0	0	0	0	0	0	0	399
16:00	441	2	2	0	0	0	0	0	0	0	0	0	0	445
17:00	417	1	1	0	0	0	0	0	0	0	0	0	0	419
18:00	393	2	4	0	0	0	0	0	0	0	0	0	0	399
19:00	391	2	5	0	0	0	0	0	0	0	0	0	0	398
20:00	286	0	2	0	0	0	0	0	0	0	0	0	0	288
21:00	241	1	0	0	0	0	0	0	0	0	0	0	0	242
22:00	109	1	1	0	0	0	0	0	0	0	0	0	0	111
23:00	36	0	1	0	0	0	0	0	0	0	0	0	0	37
Total	4671	56	33	0	0	0	0	0	0	0	0	0	0	4760
Percent	98.1%	1.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	05:00											11:00
Vol.	281	8	4											290
PM Peak	16:00	13:00	14:00											16:00
Vol.	441	6	5											445



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175607 F Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/1														
7	15	2	0	0	0	0	0	0	0	0	0	0	0	17
01:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
02:00	3	2	1	0	0	0	0	0	0	0	0	0	0	6
03:00	1	0	1	0	0	0	0	0	0	0	0	0	0	2
04:00	3	1	3	0	0	0	0	0	0	0	0	0	0	7
05:00	7	0	7	0	0	0	0	0	0	0	0	0	0	14
06:00	18	0	1	0	0	0	0	0	0	0	0	0	0	19
07:00	64	3	0	0	0	0	0	0	0	0	0	0	0	67
08:00	148	1	1	0	0	0	0	0	0	0	0	0	0	150
09:00	185	2	0	0	0	0	0	0	0	0	0	0	0	187
10:00	269	1	0	0	0	0	0	0	0	0	0	0	0	270
11:00	388	5	2	0	0	0	0	0	0	0	0	0	0	395
12 PM	434	7	1	0	0	0	0	0	0	0	0	0	0	442
13:00	428	6	3	0	0	0	0	0	0	0	0	0	0	437
14:00	397	3	5	0	0	0	0	0	0	0	0	0	0	405
15:00	433	6	5	0	0	0	0	0	0	0	0	0	0	444
16:00	400	2	1	0	0	0	0	0	0	0	0	0	0	403
17:00	384	2	0	0	0	0	0	0	0	0	0	0	0	386
18:00	379	2	1	0	0	0	0	0	0	0	0	0	0	382
19:00	329	0	1	0	0	0	0	0	0	0	0	0	0	330
20:00	266	1	2	0	0	0	0	0	0	0	0	0	0	269
21:00	207	0	0	0	0	0	0	0	0	0	0	0	0	207
22:00	123	0	0	0	0	0	0	0	0	0	0	0	0	123
23:00	39	0	0	0	0	0	0	0	0	0	0	0	0	39
Total	4925	46	35	0	0	0	0	0	0	0	0	0	0	5006
Percent	98.4%	0.9%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	05:00											11:00
Vol.	388	5	7											395
PM Peak	12:00	12:00	14:00											15:00
Vol.	434	7	5											444



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175607 F Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/1														
7	16	0	0	0	0	0	0	0	0	0	0	0	0	16
01:00	9	0	0	0	0	0	0	0	0	0	0	0	0	9
02:00	11	1	0	0	0	0	0	0	0	0	0	0	0	12
03:00	3	0	1	0	0	0	0	0	0	0	0	0	0	4
04:00	2	1	2	0	0	0	0	0	0	0	0	0	0	5
05:00	5	1	3	0	0	0	0	0	0	0	0	0	0	9
06:00	8	2	0	0	0	0	0	0	0	0	0	0	0	10
07:00	50	2	0	0	0	0	0	0	0	0	0	0	0	52
08:00	127	2	1	0	0	0	0	0	0	0	0	0	0	130
09:00	222	0	0	0	0	0	0	0	0	0	0	0	0	222
10:00	309	3	0	0	0	0	0	0	0	0	0	0	0	312
11:00	411	1	0	0	0	0	0	0	0	0	0	0	0	412
12 PM	461	3	0	0	0	0	0	0	0	0	0	0	0	464
13:00	511	2	2	0	0	0	0	0	0	0	0	0	0	515
14:00	545	2	1	0	0	0	0	0	0	0	0	0	0	548
15:00	504	1	2	0	0	0	0	0	0	0	0	0	0	507
16:00	478	2	2	0	0	0	0	0	0	0	0	0	0	482
17:00	430	1	3	0	0	0	0	0	0	0	0	0	0	434
18:00	386	0	0	0	0	0	0	0	0	0	0	0	0	386
19:00	376	0	0	0	0	0	0	0	0	0	0	0	0	376
20:00	327	1	0	0	0	0	0	0	0	0	0	0	0	328
21:00	258	0	0	0	0	0	0	0	0	0	0	0	0	258
22:00	146	0	0	0	0	0	0	0	0	0	0	0	0	146
23:00	40	0	1	0	0	0	0	0	0	0	0	0	0	41
Total	5635	25	18	0	0	0	0	0	0	0	0	0	0	5678
Percent	99.2%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	05:00											11:00
Vol.	411	3	3											412
PM Peak	14:00	12:00	17:00											14:00
Vol.	545	3	3											548



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/1														
7	20	0	0	0	0	0	0	0	0	0	0	0	0	20
01:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
02:00	12	0	0	0	0	0	0	0	0	0	0	0	0	12
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	0	1	0	0	0	0	0	0	0	0	0	0	2
05:00	4	1	1	0	0	0	0	0	0	0	0	0	0	6
06:00	11	1	0	0	0	0	0	0	0	0	0	0	0	12
07:00	46	1	0	0	0	0	0	0	0	0	0	0	0	47
08:00	137	0	0	0	0	0	0	0	0	0	0	0	0	137
09:00	214	1	0	0	0	0	0	0	0	0	0	0	0	215
10:00	312	3	0	0	0	0	0	0	0	0	0	0	0	315
11:00	399	1	0	0	0	0	0	0	0	0	0	0	0	400
12 PM	467	1	0	0	0	0	0	0	0	0	0	0	0	468
13:00	473	0	1	0	0	0	0	0	0	0	0	0	0	474
14:00	536	1	2	0	0	0	0	0	0	0	0	0	0	539
15:00	488	1	2	0	0	0	0	0	0	0	0	0	0	491
16:00	511	0	1	0	0	0	0	0	0	0	0	0	0	512
17:00	455	0	0	0	0	0	0	0	0	0	0	0	0	455
18:00	397	0	0	0	0	0	0	0	0	0	0	0	0	397
19:00	399	0	0	0	0	0	0	0	0	0	0	0	0	399
20:00	348	2	0	0	0	0	0	0	0	0	0	0	0	350
21:00	228	2	0	0	0	0	0	0	0	0	0	0	0	230
22:00	92	0	0	0	0	0	0	0	0	0	0	0	0	92
23:00	45	0	0	0	0	0	0	0	0	0	0	0	0	45
Total	5603	15	8	0	0	0	0	0	0	0	0	0	0	5626
Percent	99.6%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	04:00											11:00
Vol.	399	3	1											400
PM Peak	14:00	20:00	14:00											14:00
Vol.	536	2	2											539



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175607 F Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	10	1	0	0	0	0	0	0	0	0	0	0	0	11
01:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
02:00	1	0	1	0	0	0	0	0	0	0	0	0	0	2
03:00	1	0	2	0	0	0	0	0	0	0	0	0	0	3
04:00	2	1	3	0	0	0	0	0	0	0	0	0	0	6
05:00	5	1	0	0	0	0	0	0	0	0	0	0	0	6
06:00	11	2	1	0	0	0	0	0	0	0	0	0	0	14
07:00	56	1	0	0	0	0	0	0	0	0	0	0	0	57
08:00	99	3	0	0	0	0	0	0	0	0	0	0	0	102
09:00	140	1	2	0	0	0	0	0	0	0	0	0	0	143
10:00	219	6	0	0	0	0	0	0	0	0	0	0	0	225
11:00	320	5	0	0	0	0	0	0	0	0	0	0	0	325
12 PM	344	3	0	0	0	0	0	0	0	0	0	0	0	347
13:00	398	4	4	0	0	0	0	0	0	0	0	0	0	406
14:00	360	5	5	0	0	0	0	0	0	0	0	0	0	370
15:00	418	5	1	0	0	0	0	0	0	0	0	0	0	424
16:00	397	2	1	0	0	0	0	0	0	0	0	0	0	400
17:00	446	2	1	0	0	0	0	0	0	0	0	0	0	449
18:00	447	3	1	0	0	0	0	0	0	0	0	0	0	451
19:00	405	5	2	0	0	0	0	0	0	0	0	0	0	412
20:00	256	2	2	0	0	0	0	0	0	0	0	0	0	260
21:00	212	0	0	0	0	0	0	0	0	0	0	0	0	212
22:00	116	0	0	0	0	0	0	0	0	0	0	0	0	116
23:00	41	1	0	0	0	0	0	0	0	0	0	0	0	42
Total	4707	53	26	0	0	0	0	0	0	0	0	0	0	4786
Percent	98.3%	1.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	04:00											11:00
Vol.	320	6	3											325
PM Peak	18:00	14:00	14:00											18:00
Vol.	447	5	5											451



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175607 F Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/17														
7:00	11	0	0	0	0	0	0	0	0	0	0	0	0	11
01:00	3	0	2	0	0	0	0	0	0	0	0	0	0	5
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2
04:00	4	2	1	0	0	0	0	0	0	0	0	0	0	7
05:00	5	7	1	0	0	0	0	0	0	0	0	0	0	13
06:00	18	3	1	0	0	0	0	0	0	0	0	0	0	22
07:00	48	3	1	0	0	0	0	0	0	0	0	0	0	52
08:00	118	1	0	0	0	0	0	0	0	0	0	0	0	119
09:00	154	6	0	0	0	0	0	0	0	0	0	0	0	160
10:00	199	7	1	0	0	0	0	0	0	0	0	0	0	207
11:00	268	6	3	0	0	0	0	0	0	0	0	0	0	277
12 PM	347	4	0	0	0	0	0	0	0	0	0	0	0	351
13:00	381	6	2	0	0	0	0	0	0	0	0	0	0	389
14:00	327	6	5	0	0	0	0	0	0	0	0	0	0	338
15:00	385	2	2	0	0	0	0	0	0	0	0	0	0	389
16:00	383	2	0	0	0	0	0	0	0	0	0	0	0	385
17:00	432	1	1	0	0	0	0	0	0	0	0	0	0	434
18:00	417	2	2	0	0	0	0	0	0	0	0	0	0	421
19:00	365	3	2	0	0	0	0	0	0	0	0	0	0	370
20:00	292	3	1	0	0	0	0	0	0	0	0	0	0	296
21:00	242	0	0	0	0	0	0	0	0	0	0	0	0	242
22:00	107	1	0	0	0	0	0	0	0	0	0	0	0	108
23:00	40	0	0	0	0	0	0	0	0	0	0	0	0	40
Total	4547	68	25	0	0	0	0	0	0	0	0	0	0	4640
Percent	98.0%	1.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	05:00	11:00											11:00
Vol.	268	7	3											277
PM Peak	17:00	13:00	14:00											17:00
Vol.	432	6	5											434



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Furlong Drive  
west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 F Volume  
Site Code: 13796.00

Start Time	5/3/2017		5/4/2017		5/5/2017		5/6/2017		5/7/2017		5/8/2017		5/9/2017		Week Average	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	11	13	11	17	21	17	11	16	15	20	10	11	7	11	12	15
01:00	4	7	6	5	1	5	11	9	7	8	2	3	4	5	5	6
02:00	11	2	6	3	10	6	7	12	10	12	2	2	2	2	7	6
03:00	6	5	3	4	2	2	1	4	4	0	2	3	3	2	3	3
04:00	9	10	9	7	3	7	10	5	6	2	7	6	5	7	7	6
05:00	13	13	14	15	23	14	11	9	5	6	12	6	12	13	13	11
06:00	38	17	41	11	34	19	23	10	24	12	31	14	39	22	33	15
07:00	98	62	77	45	118	67	95	52	97	47	88	57	93	52	95	55
08:00	159	105	173	135	201	150	161	130	154	137	151	102	158	119	165	125
09:00	213	172	171	138	235	187	273	222	270	215	198	143	171	160	219	177
10:00	258	240	249	211	312	270	365	312	367	315	262	225	232	207	292	254
11:00	309	319	343	290	432	395	458	412	439	400	367	325	314	277	380	345
12:00 PM	378	360	388	367	402	442	499	464	457	468	357	347	370	351	407	400
01:00	387	419	361	366	391	437	560	515	516	474	377	406	346	389	420	429
02:00	342	367	362	408	413	405	493	548	563	539	369	370	328	338	410	425
03:00	333	365	384	399	393	444	490	507	495	491	366	424	342	389	400	431
04:00	346	363	379	445	370	403	488	482	449	512	393	400	391	385	402	427
05:00	379	400	393	419	371	386	432	434	405	455	446	449	389	434	402	425
06:00	407	391	402	399	365	382	359	386	392	397	383	451	398	421	387	404
07:00	326	363	350	398	288	330	384	376	376	399	306	412	320	370	336	378
08:00	237	326	233	288	223	269	283	328	275	350	215	260	216	296	240	302
09:00	148	220	153	242	150	207	188	258	130	230	136	212	155	242	151	230
10:00	77	121	71	111	71	123	74	146	52	92	63	116	67	108	68	117
11:00	22	39	16	37	27	39	18	41	25	45	21	42	21	40	21	40
Total	4511	4699	4595	4760	4856	5006	5694	5678	5533	5626	4564	4786	4383	4640	4875	5026
Day	9210		9355		9862		11372		11159		9350		9023		9901	
AM Peak	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00
Vol.	309	319	343	290	432	395	458	412	439	400	367	325	314	277	380	345
PM Peak	18:00	13:00	18:00	16:00	14:00	15:00	13:00	14:00	14:00	14:00	17:00	18:00	18:00	17:00	13:00	15:00
Vol.	407	419	402	445	413	444	560	548	563	539	446	451	398	434	420	431

Comb. Total	9210	9355	9862	11372	11159	9350	9023	9901
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ADT	ADT 9,904	AADT 9,904
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PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Furlong Drive  
west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 F Volume  
Site Code: 13796.00

Start	WB		EB		Combin		5/3/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Wed	
12:00	5	88	5	91	10	179		
12:15	2	91	6	88	8	179		
12:30	3	100	2	87	5	187		
12:45	1	99	0	94	1	193	738	
01:00	1	96	4	109	5	205		
01:15	1	97	0	106	1	203		
01:30	0	103	1	108	1	211		
01:45	2	91	2	96	4	187	806	
02:00	3	76	0	98	3	174		
02:15	0	81	1	83	1	164		
02:30	2	90	0	93	2	183		
02:45	6	95	1	93	7	188	709	
03:00	5	74	3	93	8	167		
03:15	0	83	0	95	0	178		
03:30	1	84	2	98	3	182		
03:45	0	92	0	79	0	171	698	
04:00	3	84	2	96	5	180		
04:15	1	77	1	96	2	173		
04:30	2	90	2	93	4	183		
04:45	3	95	5	78	8	173	709	
05:00	2	98	6	99	8	197		
05:15	1	97	4	101	5	198		
05:30	2	91	2	99	4	190		
05:45	8	93	1	101	9	194	779	
06:00	10	122	7	94	17	216		
06:15	3	97	1	103	4	200		
06:30	5	93	4	79	9	172		
06:45	20	95	5	115	25	210	798	
07:00	19	90	11	106	30	196		
07:15	19	83	16	97	35	180		
07:30	24	90	14	78	38	168		
07:45	36	63	21	82	57	145	689	
08:00	37	69	14	81	51	150		
08:15	43	64	28	92	71	156		
08:30	37	52	35	80	72	132		
08:45	42	52	28	73	70	125	563	
09:00	41	53	41	64	82	117		
09:15	57	43	38	48	95	91		
09:30	50	28	53	68	103	96		
09:45	65	24	40	40	105	64	368	
10:00	66	32	42	33	108	65		
10:15	50	19	72	36	122	55		
10:30	75	19	67	34	142	53		
10:45	67	7	59	18	126	25	198	
11:00	64	8	76	17	140	25		
11:15	76	3	75	7	151	10		
11:30	89	6	80	9	169	15		
11:45	80	5	88	6	168	11	61	
Total	1129	3382	965	3734	2094	7116		
Percent	53.9%	47.5%	46.1%	52.5%				
Day Total		4511		4699		9210		
Peak	11:00	-	06:00	-	11:00	-	00:45	-
Vol.	309	-	407	-	319	-	812	-
P.H.F.	0.868	-	0.834	-	0.906	-	0.962	-





PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Furlong Drive  
west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 F Volume  
Site Code: 13796.00

Start	WB		EB		Combin		5/4/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Thu	
12:00	2	104	7	73	9	177		
12:15	3	89	2	89	5	178		
12:30	3	87	4	103	7	190		
12:45	3	11	108	388	4	17	102	367
01:00	1	91	1	90	2	28	210	755
01:15	2	103	1	95	3		198	
01:30	0	86	1	89	1		175	
01:45	3	6	81	361	2	5	92	366
02:00	1	88	0	99	1	11	173	727
02:15	0	98	0	104	0		187	
02:30	1	69	1	112	2		202	
02:45	4	6	107	362	2	3	93	408
03:00	2	100	1	99	3		199	
03:15	0	84	2	89	2		173	
03:30	0	102	1	113	1		215	
03:45	1	3	98	384	0	4	98	399
04:00	1	98	2	109	3	7	196	783
04:15	1	91	0	111	1		207	
04:30	1	108	2	98	3		202	
04:45	6	9	82	379	3	7	127	445
05:00	0	101	2	103	9	16	206	824
05:15	0	96	5	105	2		209	
05:30	4	97	3	117	5		204	
05:45	10	14	99	393	7	15	201	
06:00	7	117	3	95	10	29	214	
06:15	2	91	1	101	3		193	812
06:30	7	97	4	100	11		212	
06:45	25	41	97	402	3	11	197	
07:00	21	90	12	103	28	52	200	801
07:15	10	97	13	93	33		183	
07:30	20	94	10	106	23		203	
07:45	26	77	69	350	30	122	188	
08:00	44	75	28	92	36		174	748
08:15	46	58	37	79	72		167	
08:30	48	59	35	66	83		137	
08:45	35	173	41	233	83	308	125	
09:00	34	50	36	83	70		92	521
09:15	36	37	32	55	70		133	
09:30	47	38	30	56	68		92	
09:45	54	171	28	153	77	309	94	395
10:00	55	24	40	138	94		76	
10:15	71	16	38	39	93		63	
10:30	53	17	52	14	122		48	
10:45	70	249	70	211	105	460	31	
11:00	90	5	60	26	140		40	182
11:15	77	4	81	18	150		23	
11:30	95	4	64	9	158		13	
11:45	81	343	3	16	159		10	
			85	290	4	37	166	633
							7	53
Total	1103	3492	881	3879	1984		7371	
Percent	55.6%	47.4%	44.4%	52.6%				
Day Total		4595		4760		9355		
Peak	11:00	-	05:15	-	11:00	-	04:45	-
Vol.	343	-	409	-	290	-	452	-
P.H.F.	0.903	-	0.874	-	0.853	-	0.890	-



PRECISION  
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Furlong Drive  
west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 F Volume  
Site Code: 13796.00

Start	WB		EB		Combin		5/5/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	8	111	2	105	10	216		
12:15	6	102	9	122	15	224		
12:30	4	87	2	109	6	196		
12:45	3	102	4	106	7	208	844	
01:00	0	116	1	105	1	221		
01:15	1	88	1	111	2	199		
01:30	0	101	1	113	1	214		
01:45	0	86	2	108	2	194	828	
02:00	0	89	1	104	1	193		
02:15	2	93	1	102	3	195		
02:30	2	94	3	101	5	195		
02:45	6	137	1	98	7	235	818	
03:00	0	109	0	102	0	211		
03:15	1	118	1	125	2	243		
03:30	0	86	1	113	1	199		
03:45	1	80	0	104	1	184	837	
04:00	1	105	0	91	1	196		
04:15	1	109	2	109	3	218		
04:30	0	68	1	106	1	174		
04:45	1	88	4	97	5	185	773	
05:00	2	79	6	91	8	170		
05:15	0	94	3	101	3	195		
05:30	9	101	2	95	11	196		
05:45	12	97	3	99	15	196	757	
06:00	6	107	5	88	11	195		
06:15	6	95	5	101	11	196		
06:30	10	89	3	94	13	183		
06:45	12	74	6	99	18	173	747	
07:00	31	71	11	97	42	168		
07:15	26	66	16	78	42	144		
07:30	20	81	28	77	48	158		
07:45	41	70	12	78	53	148	618	
08:00	48	68	32	73	80	141		
08:15	61	59	32	67	93	126		
08:30	43	45	50	69	93	114		
08:45	49	51	36	60	85	111	492	
09:00	61	39	41	59	102	98		
09:15	51	36	53	57	104	93		
09:30	48	44	44	51	92	95		
09:45	75	31	49	40	124	71	357	
10:00	68	17	43	36	111	53		
10:15	75	22	78	36	153	58		
10:30	94	18	62	29	156	47		
10:45	75	14	87	22	162	36	194	
11:00	89	8	87	17	176	25		
11:15	108	6	89	8	197	14		
11:30	106	9	102	9	208	18		
11:45	129	4	117	5	246	9	66	
Total	1392	3464	1139	3867	2531	7331		
Percent	55.0%	47.3%	45.0%	52.7%				
Day Total		4856		5006		9862		
Peak	11:00	-	02:30	-	11:00	-	02:45	-
Vol.	432	-	458	-	395	-	888	-
P.H.F.	0.837	-	0.836	-	0.844	-	0.914	-



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Furlong Drive  
west of Tomasello Drive  
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175607 F Volume  
Site Code: 13796.00

Start	WB		EB		Combin		5/6/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sat	
12:00	4	119	4	114	8	233		
12:15	4	122	6	103	10	225		
12:30	1	115	4	137	5	252		
12:45	2	143	2	110	4	253	963	
01:00	3	150	3	122	6	272		
01:15	1	125	2	119	3	244		
01:30	5	123	2	130	7	253		
01:45	2	162	2	144	4	306	1075	
02:00	2	115	2	152	4	267		
02:15	2	143	3	143	5	286		
02:30	3	120	3	118	6	238		
02:45	0	115	4	135	4	250	1041	
03:00	1	143	1	116	2	259		
03:15	0	113	2	121	2	234		
03:30	0	107	1	151	1	258		
03:45	0	127	0	119	0	246	997	
04:00	1	138	0	139	1	277		
04:15	1	109	1	122	2	231		
04:30	4	128	3	111	7	239		
04:45	4	113	1	110	5	223	970	
05:00	1	105	3	110	4	215		
05:15	0	109	2	107	2	216		
05:30	4	107	0	122	4	229		
05:45	6	111	4	95	10	206	866	
06:00	0	97	1	119	1	216		
06:15	0	84	0	100	0	184		
06:30	3	97	2	76	5	173		
06:45	20	81	7	91	27	172	745	
07:00	24	102	6	97	30	199		
07:15	18	108	12	106	30	214		
07:30	21	84	13	84	34	168		
07:45	32	90	21	89	53	179	760	
08:00	36	93	26	81	62	174		
08:15	48	66	25	92	73	158		
08:30	34	62	40	73	74	135		
08:45	43	62	39	82	82	144	611	
09:00	62	72	38	83	100	155		
09:15	75	41	60	63	135	104		
09:30	67	44	57	59	124	103		
09:45	69	31	67	53	136	84	446	
10:00	90	27	62	38	152	65		
10:15	71	26	82	35	153	61		
10:30	96	10	78	46	174	56		
10:45	108	11	90	27	198	38	220	
11:00	109	6	113	14	222	20		
11:15	94	3	97	12	191	15		
11:30	132	3	93	10	225	13		
11:45	123	6	109	5	232	11	59	
Total	1426	4268	1193	4485	2619	8753		
Percent	54.4%	48.8%	45.6%	51.2%				
Day Total		5694		5678		11372		
Peak	11:00	-	01:00	-	11:00	-	01:30	-
Vol.	458	-	560	-	412	-	569	-
P.H.F.	0.867	-	0.864	-	0.912	-	0.936	-



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Furlong Drive  
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175607 F Volume  
Site Code: 13796.00

Start	WB		EB		Combin		5/7/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sun	
12:00	2	102	1	128	3	230		
12:15	6	119	9	117	15	236		
12:30	4	122	6	97	10	219		
12:45	3	114	4	126	7	240	925	
01:00	1	130	4	122	5	252		
01:15	2	131	1	107	3	238		
01:30	1	113	0	116	1	229		
01:45	3	142	3	129	6	271	990	
02:00	2	131	6	140	8	271		
02:15	0	138	0	133	0	271		
02:30	4	150	4	128	8	278		
02:45	4	144	2	138	6	282	1102	
03:00	3	131	0	124	3	255		
03:15	0	113	0	125	0	238		
03:30	0	126	0	124	0	250		
03:45	1	125	0	118	1	243	986	
04:00	1	122	0	128	1	250		
04:15	1	107	0	141	1	248		
04:30	1	112	0	127	1	239		
04:45	3	108	2	116	5	224	961	
05:00	1	104	1	107	2	211		
05:15	1	112	1	113	2	225		
05:30	1	96	0	120	1	216		
05:45	2	93	4	115	6	208	860	
06:00	2	109	1	100	3	209		
06:15	0	93	3	107	3	200		
06:30	4	98	6	113	10	211		
06:45	18	92	2	77	20	169	789	
07:00	18	90	10	94	28	184		
07:15	18	90	10	97	28	187		
07:30	22	99	11	104	33	203		
07:45	39	97	16	104	55	201	775	
08:00	37	72	26	83	63	155		
08:15	30	77	33	108	63	185		
08:30	55	62	30	70	85	132		
08:45	32	64	48	89	80	153	625	
09:00	47	40	35	84	82	124		
09:15	65	33	59	56	124	89		
09:30	78	25	53	52	131	77		
09:45	80	32	68	38	148	70	360	
10:00	101	18	77	38	178	56		
10:15	83	14	80	31	163	45		
10:30	83	12	82	12	165	24		
10:45	100	8	76	11	176	19	144	
11:00	113	9	92	16	205	25		
11:15	104	5	99	7	203	12		
11:30	116	5	107	13	223	18		
11:45	106	6	102	9	208	15	70	
Total	1398	4135	1174	4452	2572	8587		
Percent	54.4%	48.2%	45.6%	51.8%				
Day Total		5533		5626		11159		
Peak	11:00	-	02:00	-	11:00	-	02:00	-
Vol.	439	-	563	-	400	-	539	-
P.H.F.	0.946	-	0.938	-	0.935	-	0.963	-



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Furlong Drive  
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175607 F Volume  
Site Code: 13796.00

Start	WB		EB		Combin		5/8/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Mon	
12:00	4	101	6	93	10	194		
12:15	1	84	3	86	4	170		
12:30	3	92	2	81	5	173		
12:45	2	80	0	87	2	167	704	
01:00	1	107	3	85	4	192		
01:15	0	100	0	110	0	210		
01:30	0	77	0	108	0	185		
01:45	1	93	0	103	1	196	783	
02:00	0	87	1	91	1	178		
02:15	0	86	1	72	1	158		
02:30	0	92	0	101	0	193		
02:45	2	104	0	106	2	210	739	
03:00	2	83	0	111	2	194		
03:15	0	90	2	101	2	191		
03:30	0	97	0	108	0	205		
03:45	0	96	1	104	1	200	790	
04:00	0	99	1	110	1	209		
04:15	1	87	0	95	1	182		
04:30	2	102	0	106	2	208		
04:45	4	105	5	89	9	194	793	
05:00	1	101	1	124	2	225		
05:15	0	123	1	119	1	242		
05:30	5	103	0	106	5	209		
05:45	6	119	4	100	10	219	895	
06:00	6	97	4	121	10	218		
06:15	2	113	2	115	4	228		
06:30	11	74	4	107	15	181		
06:45	12	99	4	108	16	207	834	
07:00	14	81	5	101	19	182		
07:15	16	92	18	118	34	210		
07:30	18	72	19	103	37	175		
07:45	40	61	15	90	55	151	718	
08:00	38	55	23	61	61	116		
08:15	37	61	32	60	69	121		
08:30	38	46	23	69	61	115		
08:45	38	53	24	70	62	123	475	
09:00	50	43	25	64	75	107		
09:15	45	37	45	60	90	97		
09:30	56	30	38	48	94	78		
09:45	47	26	35	40	82	66	348	
10:00	45	22	46	36	91	58		
10:15	69	17	68	40	137	57		
10:30	70	16	53	18	123	34		
10:45	78	8	58	22	136	30	179	
11:00	97	8	85	14	182	22		
11:15	74	5	69	11	143	16		
11:30	100	4	85	11	185	15		
11:45	96	4	86	6	182	10	63	
Total	1132	3432	897	3889	2029	7321		
Percent	55.8%	46.9%	44.2%	53.1%				
Day Total		4564		4786		9350		
Peak	11:00	-	05:00	-	11:00	-	05:00	-
Vol.	367	-	446	-	325	-	451	-
P.H.F.	0.918	-	0.907	-	0.945	-	0.932	-



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175607 F Volume  
Site Code: 13796.00

Start	WB		EB		Combin		5/9/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Tue	
12:00	3	100	2	87	5	187		
12:15	1	92	1	83	2	175		
12:30	2	107	3	91	5	198		
12:45	1	71	5	11	6	161	721	
01:00	1	91	1	91	2	182		
01:15	1	81	3	108	4	189		
01:30	2	99	1	89	3	188		
01:45	0	4	0	5	0	176	735	
02:00	0	68	0	99	0	167		
02:15	0	86	1	82	1	168		
02:30	1	94	1	79	2	173		
02:45	1	2	0	2	1	158	666	
03:00	1	78	0	111	1	189		
03:15	0	103	1	92	1	195		
03:30	1	86	1	89	2	175		
03:45	1	3	0	2	1	172	731	
04:00	1	94	1	97	2	191		
04:15	0	101	1	87	1	188		
04:30	1	94	2	110	3	204		
04:45	3	5	3	7	6	193	776	
05:00	1	85	5	123	6	208		
05:15	0	91	4	109	4	200		
05:30	3	108	0	96	3	204		
05:45	8	12	4	13	12	211	823	
06:00	6	102	4	98	10	200		
06:15	5	112	2	101	7	213		
06:30	12	100	10	102	22	202		
06:45	16	39	6	22	22	204	819	
07:00	19	92	7	108	26	200		
07:15	14	74	15	103	29	177		
07:30	32	76	14	80	46	156		
07:45	28	93	16	52	44	157	690	
08:00	40	53	23	82	63	135		
08:15	38	68	34	77	72	145		
08:30	38	47	30	70	68	117		
08:45	42	158	32	119	74	115	512	
09:00	31	62	36	87	67	149		
09:15	43	42	34	50	77	92		
09:30	49	27	54	69	103	96		
09:45	48	171	36	160	84	60	397	
10:00	52	23	51	33	103	56		
10:15	47	19	51	28	98	47		
10:30	64	17	49	27	113	44		
10:45	69	232	56	207	125	28	175	
11:00	61	6	53	15	114	21		
11:15	81	7	69	10	150	17		
11:30	79	4	85	8	164	12		
11:45	93	314	70	277	163	11	61	
Total	1040	3343	877	3763	1917	7106		
Percent	54.3%	47.0%	45.7%	53.0%				
Day Total		4383		4640		9023		
Peak	11:00	-	05:30	-	11:00	-	05:30	-
Vol.	314	-	427	-	277	-	828	-
P.H.F.	0.844	-	0.953	-	0.815	-	0.972	-



Page 1

175607 G Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	157	2	1	0	0	0	0	0	0	0	0	0	0	160
01:00	107	0	0	0	0	0	0	0	0	0	0	0	0	107
02:00	77	2	0	0	0	0	0	0	0	0	0	0	0	79
03:00	42	4	0	0	0	0	0	0	0	0	0	0	0	46
04:00	56	2	0	0	0	0	0	0	0	0	0	0	0	58
05:00	181	4	2	0	0	0	0	0	0	0	0	0	0	187
06:00	633	27	1	0	0	0	0	0	0	0	0	0	0	661
07:00	927	28	1	0	0	0	0	0	0	0	0	0	0	956
08:00	932	36	2	0	0	0	0	0	0	0	0	0	0	970
09:00	719	22	0	0	0	0	0	0	0	0	0	0	0	741
10:00	727	20	2	0	0	0	0	0	0	0	0	0	0	749
11:00	858	23	1	0	0	0	0	0	0	0	0	0	0	882
12 PM	960	21	0	0	0	0	0	0	0	0	0	0	0	981
13:00	906	17	1	0	0	0	0	0	0	0	0	0	0	924
14:00	992	23	0	0	0	0	0	0	0	0	0	0	0	1015
15:00	1182	18	0	0	0	0	0	0	0	0	0	0	0	1200
16:00	1260	17	1	0	0	0	0	0	0	0	0	0	0	1278
17:00	1349	8	0	0	0	0	0	0	0	0	0	0	0	1357
18:00	1239	10	0	0	0	0	0	0	0	0	0	0	0	1249
19:00	968	9	1	0	0	0	0	0	0	0	0	0	0	978
20:00	723	2	0	0	0	0	0	0	0	0	0	0	0	725
21:00	611	3	0	0	0	0	0	0	0	0	0	0	0	614
22:00	441	2	1	0	0	0	0	0	0	0	0	0	0	444
23:00	285	2	0	0	0	0	0	0	0	0	0	0	0	287
Total	16332	302	14	0	0	0	0	0	0	0	0	0	0	16648
Percent	98.1%	1.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	08:00	05:00											08:00
Vol.	932	36	2											970
PM Peak	17:00	14:00	13:00											17:00
Vol.	1349	23	1											1357



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/17														
7:00	195	3	1	0	0	0	0	0	0	0	0	0	0	199
01:00	107	0	1	0	0	0	0	0	0	0	0	0	0	108
02:00	61	2	0	0	0	0	0	0	0	0	0	0	0	63
03:00	41	2	2	0	0	0	0	0	0	0	0	0	0	45
04:00	65	5	1	0	0	0	0	0	0	0	0	0	0	71
05:00	198	5	1	0	0	0	0	0	0	0	0	0	0	204
06:00	631	20	1	0	0	0	0	0	0	0	0	0	0	652
07:00	977	36	0	0	0	0	0	0	0	0	0	0	0	1013
08:00	901	21	1	0	0	0	0	0	0	0	0	0	0	923
09:00	657	29	2	0	0	0	0	0	0	0	0	0	0	688
10:00	688	23	1	0	0	0	0	0	0	0	0	0	0	712
11:00	812	17	0	0	0	0	0	0	0	0	0	0	0	829
12 PM	909	13	1	0	0	0	0	0	0	0	0	0	0	923
13:00	929	24	0	0	0	0	0	0	0	0	0	0	0	953
14:00	1027	32	1	0	0	0	0	0	0	0	0	0	0	1060
15:00	1245	25	0	0	0	0	0	0	0	0	0	0	0	1270
16:00	1363	15	0	0	0	0	0	0	0	0	0	0	0	1378
17:00	1433	10	0	0	0	0	0	0	0	0	0	0	0	1443
18:00	1231	5	0	0	0	0	0	0	0	0	0	0	0	1236
19:00	1000	6	0	0	0	0	0	0	0	0	0	0	0	1006
20:00	817	7	1	0	0	0	0	0	0	0	0	0	0	825
21:00	583	4	0	0	0	0	0	0	0	0	0	0	0	587
22:00	461	6	0	0	0	0	0	0	0	0	0	0	0	467
23:00	305	3	0	0	0	0	0	0	0	0	0	0	0	308
Total	16636	313	14	0	0	0	0	0	0	0	0	0	0	16963
Percent	98.1%	1.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	03:00											07:00
Vol.	977	36	2											1013
PM Peak	17:00	14:00	12:00											17:00
Vol.	1433	32	1											1443





Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	212	3	1	0	0	0	0	0	0	0	0	0	0	216
01:00	139	0	0	0	0	0	0	0	0	0	0	0	0	139
02:00	91	1	0	0	0	0	0	0	0	0	0	0	0	92
03:00	47	2	0	0	0	0	0	0	0	0	0	0	0	49
04:00	51	1	0	0	0	0	0	0	0	0	0	0	0	52
05:00	179	7	0	0	0	0	0	0	0	0	0	0	0	186
06:00	582	12	2	0	0	0	0	0	0	0	0	0	0	596
07:00	910	24	1	0	0	0	0	0	0	0	0	0	0	935
08:00	884	24	5	0	0	0	0	0	0	0	0	0	0	913
09:00	656	35	4	0	0	0	0	0	0	0	0	0	0	695
10:00	697	22	0	0	0	0	0	0	0	0	0	0	0	719
11:00	920	15	0	0	0	0	0	0	0	0	0	0	0	935
12 PM	912	13	0	0	0	0	0	0	0	0	0	0	0	925
13:00	938	29	0	0	0	0	0	0	0	0	0	0	0	967
14:00	1136	25	2	0	0	0	0	0	0	0	0	0	0	1163
15:00	1210	19	1	0	0	0	0	0	0	0	0	0	0	1230
16:00	1314	14	0	0	0	0	0	0	0	0	0	0	0	1328
17:00	1341	15	0	0	0	0	0	0	0	0	0	0	0	1356
18:00	1085	7	1	0	0	0	0	0	0	0	0	0	0	1093
19:00	941	3	0	0	0	0	0	0	0	0	0	0	0	944
20:00	624	8	0	0	0	0	0	0	0	0	0	0	0	632
21:00	590	3	1	0	0	0	0	0	0	0	0	0	0	594
22:00	490	4	0	0	0	0	0	0	0	0	0	0	0	494
23:00	377	2	0	0	0	0	0	0	0	0	0	0	0	379
Total	16326	288	18	0	0	0	0	0	0	0	0	0	0	16632
Percent	98.2%	1.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	08:00											07:00
Vol.	920	35	5											935
PM Peak	17:00	13:00	14:00											17:00
Vol.	1341	29	2											1356



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	273	0	0	0	0	0	0	0	0	0	0	0	0	273
01:00	199	0	0	0	0	0	0	0	0	0	0	0	0	199
02:00	166	1	0	0	0	0	0	0	0	0	0	0	0	167
03:00	91	1	0	0	0	0	0	0	0	0	0	0	0	92
04:00	72	2	1	0	0	0	0	0	0	0	0	0	0	75
05:00	84	0	0	0	0	0	0	0	0	0	0	0	0	84
06:00	205	11	1	0	0	0	0	0	0	0	0	0	0	217
07:00	319	11	1	0	0	0	0	0	0	0	0	0	0	331
08:00	461	7	2	0	0	0	0	0	0	0	0	0	0	470
09:00	618	16	1	0	0	0	0	0	0	0	0	0	0	635
10:00	794	11	0	0	0	0	0	0	0	0	0	0	0	805
11:00	1008	9	1	0	0	0	0	0	0	0	0	0	0	1018
12 PM	1138	11	0	0	0	0	0	0	0	0	0	0	0	1149
13:00	1263	11	0	0	0	0	0	0	0	0	0	0	0	1274
14:00	1223	8	0	0	0	0	0	0	0	0	0	0	0	1231
15:00	1221	6	0	0	0	0	0	0	0	0	0	0	0	1227
16:00	1293	8	1	0	0	0	0	0	0	0	0	0	0	1302
17:00	1099	6	0	0	0	0	0	0	0	0	0	0	0	1105
18:00	1039	6	0	0	0	0	0	0	0	0	0	0	0	1045
19:00	910	4	0	0	0	0	0	0	0	0	0	0	0	914
20:00	751	2	1	0	0	0	0	0	0	0	0	0	0	754
21:00	715	1	0	0	0	0	0	0	0	0	0	0	0	716
22:00	540	0	0	0	0	0	0	0	0	0	0	0	0	540
23:00	417	1	0	0	0	0	0	0	0	0	0	0	0	418
Total	15899	133	9	0	0	0	0	0	0	0	0	0	0	16041
Percent	99.1%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	08:00											11:00
Vol.	1008	16	2											1018
PM Peak	16:00	12:00	16:00											16:00
Vol.	1293	11	1											1302



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/1														
7	298	1	0	0	0	0	0	0	0	0	0	0	0	299
01:00	244	3	0	0	0	0	0	0	0	0	0	0	0	247
02:00	189	0	0	0	0	0	0	0	0	0	0	0	0	189
03:00	113	0	0	0	0	0	0	0	0	0	0	0	0	113
04:00	58	2	1	0	0	0	0	0	0	0	0	0	0	61
05:00	74	0	0	0	0	0	0	0	0	0	0	0	0	74
06:00	158	3	0	0	0	0	0	0	0	0	0	0	0	161
07:00	245	2	0	0	0	0	0	0	0	0	0	0	0	247
08:00	419	4	0	0	0	0	0	0	0	0	0	0	0	423
09:00	561	8	0	0	0	0	0	0	0	0	0	0	0	569
10:00	717	7	1	0	0	0	0	0	0	0	0	0	0	725
11:00	997	6	0	0	0	0	0	0	0	0	0	0	0	1003
12 PM	1103	6	0	0	0	0	0	0	0	0	0	0	0	1109
13:00	1199	4	0	0	0	0	0	0	0	0	0	0	0	1203
14:00	1207	7	0	0	0	0	0	0	0	0	0	0	0	1214
15:00	1102	1	0	0	0	0	0	0	0	0	0	0	0	1103
16:00	1064	4	0	0	0	0	0	0	0	0	0	0	0	1068
17:00	1021	6	0	0	0	0	0	0	0	0	0	0	0	1027
18:00	995	1	0	0	0	0	0	0	0	0	0	0	0	996
19:00	837	2	0	0	0	0	0	0	0	0	0	0	0	839
20:00	690	4	0	0	0	0	0	0	0	0	0	0	0	694
21:00	544	1	1	0	0	0	0	0	0	0	0	0	0	546
22:00	405	0	0	0	0	0	0	0	0	0	0	0	0	405
23:00	251	0	0	0	0	0	0	0	0	0	0	0	0	251
Total	14491	72	3	0	0	0	0	0	0	0	0	0	0	14566
Percent	99.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	04:00											11:00
Vol.	997	8	1											1003
PM Peak	14:00	14:00	21:00											14:00
Vol.	1207	7	1											1214



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175607 G Class  
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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/1														
7	173	3	0	0	0	0	0	0	0	0	0	0	0	176
01:00	90	0	0	0	0	0	0	0	0	0	0	0	0	90
02:00	66	2	0	0	0	0	0	0	0	0	0	0	0	68
03:00	49	2	0	0	0	0	0	0	0	0	0	0	0	51
04:00	60	3	0	0	0	0	0	0	0	0	0	0	0	63
05:00	164	4	1	0	0	0	0	0	0	0	0	0	0	169
06:00	604	11	1	0	0	0	0	0	0	0	0	0	0	616
07:00	930	26	0	0	0	0	0	0	0	0	0	0	0	956
08:00	848	27	1	0	0	0	0	0	0	0	0	0	0	876
09:00	615	30	0	0	0	0	0	0	0	0	0	0	0	645
10:00	686	19	1	0	0	0	0	0	0	0	0	0	0	706
11:00	819	23	0	0	0	0	0	0	0	0	0	0	0	842
12 PM	869	22	1	0	0	0	0	0	0	0	0	0	0	892
13:00	870	14	1	0	0	0	0	0	0	0	0	0	0	885
14:00	1020	33	1	0	0	0	0	0	0	0	0	0	0	1054
15:00	1126	31	0	0	0	0	0	0	0	0	0	0	0	1157
16:00	1317	13	2	0	0	0	0	0	0	0	0	0	0	1332
17:00	1433	12	0	0	0	0	0	0	0	0	0	0	0	1445
18:00	1180	7	0	0	0	0	0	0	0	0	0	0	0	1187
19:00	912	2	0	0	0	0	0	0	0	0	0	0	0	914
20:00	686	7	0	0	0	0	0	0	0	0	0	0	0	693
21:00	529	1	0	0	0	0	0	0	0	0	0	0	0	530
22:00	359	1	0	0	0	0	0	0	0	0	0	0	0	360
23:00	245	0	0	0	0	0	0	0	0	0	0	0	0	245
Total	15650	293	9	0	0	0	0	0	0	0	0	0	0	15952
Percent	98.1%	1.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	09:00	05:00											07:00
Vol.	930	30	1											956
PM Peak	17:00	14:00	16:00											17:00
Vol.	1433	33	2											1445



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175607 G Class  
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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/1														
7	159	2	0	0	0	0	0	0	0	0	0	0	0	161
01:00	89	0	0	0	0	0	0	0	0	0	0	0	0	89
02:00	56	2	0	0	0	0	0	0	0	0	0	0	0	58
03:00	42	1	0	0	0	0	0	0	0	0	0	0	0	43
04:00	51	1	0	0	0	0	0	0	0	0	0	0	0	52
05:00	175	6	0	0	0	0	0	0	0	0	0	0	0	181
06:00	690	14	3	0	0	0	0	0	0	0	0	0	0	707
07:00	1011	37	0	0	0	0	0	0	0	0	0	0	0	1048
08:00	910	32	3	0	0	0	0	0	0	0	0	0	0	945
09:00	717	38	4	0	0	0	0	0	0	0	0	0	0	759
10:00	736	26	2	0	0	0	0	0	0	0	0	0	0	764
11:00	767	21	0	0	0	0	0	0	0	0	0	0	0	788
12 PM	816	20	1	0	0	0	0	0	0	0	0	0	0	837
13:00	856	30	1	0	0	0	0	0	0	0	0	0	0	887
14:00	965	34	0	0	0	0	0	0	0	0	0	0	0	999
15:00	1129	29	0	0	0	0	0	0	0	0	0	0	0	1158
16:00	1311	16	2	0	0	0	0	0	0	0	0	0	0	1329
17:00	1316	13	0	0	0	0	0	0	0	0	0	0	0	1329
18:00	1129	6	0	0	0	0	0	0	0	0	0	0	0	1135
19:00	938	6	0	0	0	0	0	0	0	0	0	0	0	944
20:00	715	2	0	0	0	0	0	0	0	0	0	0	0	717
21:00	529	5	0	0	0	0	0	0	0	0	0	0	0	534
22:00	408	2	0	0	0	0	0	0	0	0	0	0	0	410
23:00	300	1	1	0	0	0	0	0	0	0	0	0	0	302
Total	15815	344	17	0	0	0	0	0	0	0	0	0	0	16176
Percent	97.8%	2.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	09:00	09:00											07:00
Vol.	1011	38	4											1048
PM Peak	17:00	14:00	16:00											16:00
Vol.	1316	34	2											1329



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/1														
7	107	0	0	0	0	0	0	0	0	0	0	0	0	107
01:00	83	0	0	0	0	0	0	0	0	0	0	0	0	83
02:00	54	1	1	0	0	0	0	0	0	0	0	0	0	56
03:00	54	3	4	0	0	0	0	0	0	0	0	0	0	61
04:00	115	1	5	0	0	0	0	0	0	0	0	0	0	121
05:00	338	6	9	0	0	0	0	0	0	0	0	0	0	353
06:00	722	12	0	0	0	0	0	0	0	0	0	0	0	734
07:00	1120	33	4	0	0	0	0	0	0	0	0	0	0	1157
08:00	958	34	3	0	0	0	0	0	0	0	0	0	0	995
09:00	797	32	5	0	0	0	0	0	0	0	0	0	0	834
10:00	764	16	4	0	0	0	0	0	0	0	0	0	0	784
11:00	786	9	17	0	0	0	0	0	0	0	0	0	0	812
12 PM	922	32	2	0	0	0	0	0	0	0	0	0	0	956
13:00	838	31	8	0	0	0	0	0	0	0	0	0	0	877
14:00	893	28	7	0	0	0	0	0	0	0	0	0	0	928
15:00	1056	16	2	0	0	0	0	0	0	0	0	0	0	1074
16:00	1012	12	2	0	0	0	0	0	0	0	0	0	0	1026
17:00	1131	9	1	0	0	0	0	0	0	0	0	0	0	1141
18:00	953	12	2	0	0	0	0	0	0	0	0	0	0	967
19:00	726	8	4	0	0	0	0	0	0	0	0	0	0	738
20:00	623	6	1	0	0	0	0	0	0	0	0	0	0	630
21:00	451	4	1	0	0	0	0	0	0	0	0	0	0	456
22:00	318	1	1	0	0	0	0	0	0	0	0	0	0	320
23:00	213	1	0	0	0	0	0	0	0	0	0	0	0	214
Total	15034	307	83	0	0	0	0	0	0	0	0	0	0	15424
Percent	97.5%	2.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	08:00	11:00											07:00
Vol.	1120	34	17											1157
PM Peak	17:00	12:00	13:00											17:00
Vol.	1131	32	8											1141



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/17														
7:00	111	1	0	0	0	0	0	0	0	0	0	0	0	112
01:00	69	0	1	0	0	0	0	0	0	0	0	0	0	70
02:00	61	1	2	0	0	0	0	0	0	0	0	0	0	64
03:00	61	1	2	0	0	0	0	0	0	0	0	0	0	64
04:00	107	1	5	0	0	0	0	0	0	0	0	0	0	113
05:00	343	6	9	0	0	0	0	0	0	0	0	0	0	358
06:00	751	12	1	0	0	0	0	0	0	0	0	0	0	764
07:00	1096	34	2	0	0	0	0	0	0	0	0	0	0	1132
08:00	973	24	1	0	0	0	0	0	0	0	0	0	0	998
09:00	798	27	2	0	0	0	0	0	0	0	0	0	0	827
10:00	728	20	4	0	0	0	0	0	0	0	0	0	0	752
11:00	714	29	3	0	0	0	0	0	0	0	0	0	0	746
12 PM	829	28	1	0	0	0	0	0	0	0	0	0	0	858
13:00	834	25	3	0	0	0	0	0	0	0	0	0	0	862
14:00	977	33	9	0	0	0	0	0	0	0	0	0	0	1019
15:00	1127	26	1	0	0	0	0	0	0	0	0	0	0	1154
16:00	1062	21	4	0	0	0	0	0	0	0	0	0	0	1087
17:00	1108	11	2	0	0	0	0	0	0	0	0	0	0	1121
18:00	1015	17	3	0	0	0	0	0	0	0	0	0	0	1035
19:00	805	9	5	0	0	0	0	0	0	0	0	0	0	819
20:00	605	8	3	0	0	0	0	0	0	0	0	0	0	616
21:00	483	3	0	0	0	0	0	0	0	0	0	0	0	486
22:00	314	1	2	0	0	0	0	0	0	0	0	0	0	317
23:00	221	6	0	0	0	0	0	0	0	0	0	0	0	227
Total	15192	344	65	0	0	0	0	0	0	0	0	0	0	15601
Percent	97.4%	2.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	05:00											07:00
Vol.	1096	34	9											1132
PM Peak	15:00	14:00	14:00											15:00
Vol.	1127	33	9											1154



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/1														
7	114	3	2	0	0	0	0	0	0	0	0	0	0	119
01:00	97	1	0	0	0	0	0	0	0	0	0	0	0	98
02:00	85	2	3	0	0	0	0	0	0	0	0	0	0	90
03:00	65	1	0	0	0	0	0	0	0	0	0	0	0	66
04:00	118	2	3	0	0	0	0	0	0	0	0	0	0	123
05:00	330	6	7	0	0	0	0	0	0	0	0	0	0	343
06:00	693	15	1	0	0	0	0	0	0	0	0	0	0	709
07:00	1051	32	3	0	0	0	0	0	0	0	0	0	0	1086
08:00	922	25	1	0	0	0	0	0	0	0	0	0	0	948
09:00	729	27	1	0	0	0	0	0	0	0	0	0	0	757
10:00	746	27	3	0	0	0	0	0	0	0	0	0	0	776
11:00	775	20	5	0	0	0	0	0	0	0	0	0	0	800
12 PM	817	37	1	0	0	0	0	0	0	0	0	0	0	855
13:00	895	25	4	0	0	0	0	0	0	0	0	0	0	924
14:00	975	23	5	0	0	0	0	0	0	0	0	0	0	1003
15:00	1090	21	5	0	0	0	0	0	0	0	0	0	0	1116
16:00	1004	25	2	0	0	0	0	0	0	0	0	0	0	1031
17:00	1083	16	0	0	0	0	0	0	0	0	0	0	0	1099
18:00	917	9	1	0	0	0	0	0	0	0	0	0	0	927
19:00	730	4	1	0	0	0	0	0	0	0	0	0	0	735
20:00	572	4	1	0	0	0	0	0	0	0	0	0	0	577
21:00	502	3	0	0	0	0	0	0	0	0	0	0	0	505
22:00	385	5	0	0	0	0	0	0	0	0	0	0	0	390
23:00	268	1	0	0	0	0	0	0	0	0	0	0	0	269
Total	14963	334	49	0	0	0	0	0	0	0	0	0	0	15346
Percent	97.5%	2.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	05:00											07:00
Vol.	1051	32	7											1086
PM Peak	15:00	12:00	14:00											15:00
Vol.	1090	37	5											1116





Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	211	0	0	0	0	0	0	0	0	0	0	0	0	211
01:00	163	0	0	0	0	0	0	0	0	0	0	0	0	163
02:00	138	2	1	0	0	0	0	0	0	0	0	0	0	141
03:00	85	0	1	0	0	0	0	0	0	0	0	0	0	86
04:00	80	1	4	0	0	0	0	0	0	0	0	0	0	85
05:00	145	1	4	0	0	0	0	0	0	0	0	0	0	150
06:00	296	7	3	0	0	0	0	0	0	0	0	0	0	306
07:00	434	12	1	0	0	0	0	0	0	0	0	0	0	447
08:00	567	13	2	0	0	0	0	0	0	0	0	0	0	582
09:00	693	6	1	0	0	0	0	0	0	0	0	0	0	700
10:00	886	10	3	0	0	0	0	0	0	0	0	0	0	899
11:00	990	11	0	0	0	0	0	0	0	0	0	0	0	1001
12 PM	1030	13	0	0	0	0	0	0	0	0	0	0	0	1043
13:00	1091	9	2	0	0	0	0	0	0	0	0	0	0	1102
14:00	1073	11	1	0	0	0	0	0	0	0	0	0	0	1085
15:00	1126	17	2	0	0	0	0	0	0	0	0	0	0	1145
16:00	1109	10	3	0	0	0	0	0	0	0	0	0	0	1122
17:00	1078	6	1	0	0	0	0	0	0	0	0	0	0	1085
18:00	924	5	1	0	0	0	0	0	0	0	0	0	0	930
19:00	978	2	1	0	0	0	0	0	0	0	0	0	0	981
20:00	672	0	0	0	0	0	0	0	0	0	0	0	0	672
21:00	615	2	1	0	0	0	0	0	0	0	0	0	0	618
22:00	425	2	0	0	0	0	0	0	0	0	0	0	0	427
23:00	316	1	0	0	0	0	0	0	0	0	0	0	0	317
Total	15125	141	32	0	0	0	0	0	0	0	0	0	0	15298
Percent	98.9%	0.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	04:00											11:00
Vol.	990	13	4											1001
PM Peak	15:00	15:00	16:00											15:00
Vol.	1126	17	3											1145



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175607 G Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/1														
7	206	3	0	0	0	0	0	0	0	0	0	0	0	209
01:00	173	0	0	0	0	0	0	0	0	0	0	0	0	173
02:00	180	1	0	0	0	0	0	0	0	0	0	0	0	181
03:00	87	2	0	0	0	0	0	0	0	0	0	0	0	89
04:00	68	0	1	0	0	0	0	0	0	0	0	0	0	69
05:00	123	0	1	0	0	0	0	0	0	0	0	0	0	124
06:00	197	1	0	0	0	0	0	0	0	0	0	0	0	198
07:00	291	0	0	0	0	0	0	0	0	0	0	0	0	291
08:00	420	2	0	0	0	0	0	0	0	0	0	0	0	422
09:00	593	4	0	0	0	0	0	0	0	0	0	0	0	597
10:00	727	16	0	0	0	0	0	0	0	0	0	0	0	743
11:00	867	2	0	0	0	0	0	0	0	0	0	0	0	869
12 PM	1026	7	0	0	0	0	0	0	0	0	0	0	0	1033
13:00	1048	3	1	0	0	0	0	0	0	0	0	0	0	1052
14:00	1150	10	2	0	0	0	0	0	0	0	0	0	0	1162
15:00	1087	4	2	0	0	0	0	0	0	0	0	0	0	1093
16:00	993	2	1	0	0	0	0	0	0	0	0	0	0	996
17:00	802	2	0	0	0	0	0	0	0	0	0	0	0	804
18:00	766	8	0	0	0	0	0	0	0	0	0	0	0	774
19:00	718	3	0	0	0	0	0	0	0	0	0	0	0	721
20:00	587	3	0	0	0	0	0	0	0	0	0	0	0	590
21:00	450	1	1	0	0	0	0	0	0	0	0	0	0	452
22:00	322	1	0	0	0	0	0	0	0	0	0	0	0	323
23:00	176	1	0	0	0	0	0	0	0	0	0	0	0	177
Total	13057	76	9	0	0	0	0	0	0	0	0	0	0	13142
Percent	99.4%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	04:00											11:00
Vol.	867	16	1											869
PM Peak	14:00	14:00	14:00											14:00
Vol.	1150	10	2											1162



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175607 G Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	94	1	2	0	0	0	0	0	0	0	0	0	0	97
01:00	81	0	0	0	0	0	0	0	0	0	0	0	0	81
02:00	69	3	2	0	0	0	0	0	0	0	0	0	0	74
03:00	72	3	2	0	0	0	0	0	0	0	0	0	0	77
04:00	122	2	3	0	0	0	0	0	0	0	0	0	0	127
05:00	342	5	1	0	0	0	0	0	0	0	0	0	0	348
06:00	746	14	1	0	0	0	0	0	0	0	0	0	0	761
07:00	1021	40	2	0	0	0	0	0	0	0	0	0	0	1063
08:00	989	30	2	0	0	0	0	0	0	0	0	0	0	1021
09:00	749	33	4	0	0	0	0	0	0	0	0	0	0	786
10:00	720	21	3	0	0	0	0	0	0	0	0	0	0	744
11:00	708	37	5	0	0	0	0	0	0	0	0	0	0	750
12 PM	746	27	5	0	0	0	0	0	0	0	0	0	0	778
13:00	771	22	4	0	0	0	0	0	0	0	0	0	0	797
14:00	880	34	9	0	0	0	0	0	0	0	0	0	0	923
15:00	1088	30	2	0	0	0	0	0	0	0	0	0	0	1120
16:00	1017	19	1	0	0	0	0	0	0	0	0	0	0	1037
17:00	1116	15	1	0	0	0	0	0	0	0	0	0	0	1132
18:00	895	12	1	0	0	0	0	0	0	0	0	0	0	908
19:00	716	15	4	0	0	0	0	0	0	0	0	0	0	735
20:00	523	8	2	0	0	0	0	0	0	0	0	0	0	533
21:00	417	1	0	0	0	0	0	0	0	0	0	0	0	418
22:00	271	2	0	0	0	0	0	0	0	0	0	0	0	273
23:00	161	0	0	0	0	0	0	0	0	0	0	0	0	161
Total	14314	374	56	0	0	0	0	0	0	0	0	0	0	14744
Percent	97.1%	2.5%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	11:00											07:00
Vol.	1021	40	5											1063
PM Peak	17:00	14:00	14:00											17:00
Vol.	1116	34	9											1132



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175607 G Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/17														
7:00	96	0	0	0	0	0	0	0	0	0	0	0	0	96
01:00	66	0	2	0	0	0	0	0	0	0	0	0	0	68
02:00	44	2	2	0	0	0	0	0	0	0	0	0	0	48
03:00	58	1	1	0	0	0	0	0	0	0	0	0	0	60
04:00	122	3	2	0	0	0	0	0	0	0	0	0	0	127
05:00	352	7	8	0	0	0	0	0	0	0	0	0	0	367
06:00	778	9	1	0	0	0	0	0	0	0	0	0	0	788
07:00	1059	43	2	0	0	0	0	0	0	0	0	0	0	1104
08:00	1022	26	3	0	0	0	0	0	0	0	0	0	0	1051
09:00	718	32	1	0	0	0	0	0	0	0	0	0	0	751
10:00	696	40	5	0	0	0	0	0	0	0	0	0	0	741
11:00	748	22	4	0	0	0	0	0	0	0	0	0	0	774
12 PM	743	29	1	0	0	0	0	0	0	0	0	0	0	773
13:00	790	31	2	0	0	0	0	0	0	0	0	0	0	823
14:00	885	36	7	0	0	0	0	0	0	0	0	0	0	928
15:00	1043	34	3	0	0	0	0	0	0	0	0	0	0	1080
16:00	976	24	0	0	0	0	0	0	0	0	0	0	0	1000
17:00	1141	15	4	0	0	0	0	0	0	0	0	0	0	1160
18:00	834	14	3	0	0	0	0	0	0	0	0	0	0	851
19:00	713	4	4	0	0	0	0	0	0	0	0	0	0	721
20:00	511	4	0	0	0	0	0	0	0	0	0	0	0	515
21:00	444	1	1	0	0	0	0	0	0	0	0	0	0	446
22:00	259	2	1	0	0	0	0	0	0	0	0	0	0	262
23:00	206	1	0	0	0	0	0	0	0	0	0	0	0	207
Total	14304	380	57	0	0	0	0	0	0	0	0	0	0	14741
Percent	97.0%	2.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	05:00											07:00
Vol.	1059	43	8											1104
PM Peak	17:00	14:00	14:00											17:00
Vol.	1141	36	7											1160



PRECISION  
D A T A  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Winthrop Avenue (Route 145)  
west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 G Volume  
Site Code: 13796.00

Start Time	5/3/2017		5/4/2017		5/5/2017		5/6/2017		5/7/2017		5/8/2017		5/9/2017		Week Average	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	160	107	199	112	216	119	273	211	299	209	176	97	161	96	212	136
01:00	107	83	108	70	139	98	199	163	247	173	90	81	89	68	140	105
02:00	79	56	63	64	92	90	167	141	189	181	68	74	58	48	102	93
03:00	46	61	45	64	49	66	92	86	113	89	51	77	43	60	63	72
04:00	58	121	71	113	52	123	75	85	61	69	63	127	52	127	62	109
05:00	187	353	204	358	186	343	84	150	74	124	169	348	181	367	155	292
06:00	661	734	652	764	596	709	217	306	161	198	616	761	707	788	516	609
07:00	956	1157	1013	1132	935	1086	331	447	247	291	956	1063	1048	1104	784	897
08:00	970	995	923	998	913	948	470	582	423	422	876	1021	945	1051	789	860
09:00	741	834	688	827	695	757	635	700	569	597	645	786	759	751	676	750
10:00	749	784	712	752	719	776	805	899	725	743	706	744	764	741	740	777
11:00	882	812	829	746	935	800	1018	1001	1003	869	842	750	788	774	900	822
12:00 PM	981	956	923	858	925	855	1149	1043	1109	1033	892	778	837	773	974	899
01:00	924	877	953	862	967	924	1274	1102	1203	1052	885	797	887	823	1013	920
02:00	1015	928	1060	1019	1163	1003	1231	1085	1214	1162	1054	923	999	928	1105	1007
03:00	1200	1074	1270	1154	1230	1116	1227	1145	1103	1093	1157	1120	1158	1080	1192	1112
04:00	1278	1026	1378	1087	1328	1031	1302	1122	1068	996	1332	1037	1329	1000	1288	1043
05:00	1357	1141	1443	1121	1356	1099	1105	1085	1027	804	1445	1132	1329	1160	1295	1077
06:00	1249	967	1236	1035	1093	927	1045	930	996	774	1187	908	1135	851	1134	913
07:00	978	738	1006	819	944	735	914	981	839	721	914	735	944	721	934	779
08:00	725	630	825	616	632	577	754	672	694	590	693	533	717	515	720	590
09:00	614	456	587	486	594	505	716	618	546	452	530	418	534	446	589	483
10:00	444	320	467	317	494	390	540	427	405	323	360	273	410	262	446	330
11:00	287	214	308	227	379	269	418	317	251	177	245	161	302	207	313	225
Total	16648	15424	16963	15601	16632	15346	16041	15298	14566	13142	15952	14744	16176	14741	16142	14900
Day	32072		32564		31978		31339		27708		30696		30917		31042	
AM Peak	08:00	07:00	07:00	07:00	07:00	07:00	11:00	11:00	11:00	11:00	07:00	07:00	07:00	07:00	11:00	07:00
Vol.	970	1157	1013	1132	935	1086	1018	1001	1003	869	956	1063	1048	1104	900	897
PM Peak	17:00	17:00	17:00	15:00	17:00	15:00	16:00	15:00	14:00	14:00	17:00	17:00	16:00	17:00	17:00	15:00
Vol.	1357	1141	1443	1154	1356	1116	1302	1145	1214	1162	1445	1132	1329	1160	1295	1112

Comb. Total	32072	32564	31978	31339	27708	30696	30917	31042
ADT	ADT 31,039	AADT 31,039						



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Winthrop Avenue (Route 145)  
west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 G Volume  
Site Code: 13796.00

Start	EB		WB		Combin		ed		5/3/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Wed	
12:00	52	244	30	232	82	476				
12:15	54	241	28	227	82	468				
12:30	30	251	31	264	61	515				
12:45	24	245	18	233	42	478	1937			
01:00	24	209	25	245	49	454				
01:15	32	252	18	221	50	473				
01:30	22	227	20	205	42	432				
01:45	29	236	20	206	49	442	1801			
02:00	25	226	8	255	33	481				
02:15	11	238	16	239	27	477				
02:30	19	266	14	207	33	473				
02:45	24	285	18	227	42	512	1943			
03:00	15	286	15	262	30	548				
03:15	3	331	10	265	13	596				
03:30	16	294	15	300	31	594				
03:45	12	289	21	247	33	536	2274			
04:00	6	276	21	243	27	519				
04:15	12	332	28	273	40	605				
04:30	15	330	34	254	49	584				
04:45	25	340	38	256	63	596	2304			
05:00	28	354	68	275	96	629				
05:15	36	386	69	313	105	699				
05:30	49	315	102	275	151	590				
05:45	74	302	114	278	188	580	2498			
06:00	85	336	152	253	237	589				
06:15	167	361	175	250	342	611				
06:30	193	293	189	226	382	519				
06:45	216	259	218	238	434	497	2216			
07:00	223	276	244	215	467	491				
07:15	242	256	330	179	572	435				
07:30	254	234	304	191	558	425				
07:45	237	212	279	153	516	365	1716			
08:00	260	188	265	163	525	351				
08:15	269	187	280	180	549	367				
08:30	228	165	241	134	469	299				
08:45	213	185	209	153	422	338	1355			
09:00	202	179	204	119	406	298				
09:15	172	154	216	121	388	275				
09:30	190	137	203	121	393	258				
09:45	177	144	211	95	388	239	1070			
10:00	207	136	198	82	405	218				
10:15	163	117	199	101	362	218				
10:30	200	90	206	78	406	168				
10:45	179	101	181	59	360	160	764			
11:00	224	75	207	67	431	142				
11:15	208	85	195	60	403	145				
11:30	219	64	190	52	409	116				
11:45	231	63	220	35	451	98	501			
Total	5596	11052	6097	9327	11693	20379				
Percent	47.9%	54.2%	52.1%	45.8%						
Day Total		16648		15424		32072				
Peak	07:30	-	04:30	-	07:15	-	04:45	-	-	-
Vol.	1020	-	1410	-	1178	-	2514	-	-	-
P.H.F.	0.948	-	0.913	-	0.892	-	0.899	-	-	-



PRECISION  
D A T A  
INDUSTRIES, LLC

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Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Winthrop Avenue (Route 145)  
west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 G Volume  
Site Code: 13796.00

Start	EB		WB		Combin		ed		5/4/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Thu	
12:00	62	205	34	199	96	404				
12:15	49	236	22	220	71	456				
12:30	46	234	26	223	72	457				
12:45	42	199 248	923 30	112 216	858 72	311 464	1781			
01:00	28	227	19	217	47	444				
01:15	36	254	24	181	60	435				
01:30	19	251	12	250	31	501				
01:45	25	108 221	953 15	70 214	862 40	178 435	1815			
02:00	15	235	19	259	34	494				
02:15	14	257	14	247	28	504				
02:30	11	244	16	248	27	492				
02:45	23	63 324	1060 15	64 265	1019 38	127 589	2079			
03:00	17	298	13	269	30	567				
03:15	16	297	17	283	33	580				
03:30	9	350	14	306	23	656				
03:45	3	45 325	1270 20	64 296	1154 23	109 621	2424			
04:00	8	309	16	271	24	580				
04:15	17	362	31	252	48	614				
04:30	18	339	34	290	52	629				
04:45	28	71 368	1378 32	113 274	1087 60	184 642	2465			
05:00	39	336	63	259	102	595				
05:15	42	346	81	265	123	611				
05:30	51	399	106	298	157	697				
05:45	72	204 362	1443 108	358 299	1121 180	562 661	2564			
06:00	97	322	148	290	245	612				
06:15	151	317	175	258	326	575				
06:30	165	308	217	260	382	568				
06:45	239	652 289	1236 224	764 227	1035 463	1416 516	2271			
07:00	244	264	267	234	511	498				
07:15	266	259	286	218	552	477				
07:30	242	287	321	175	563	462				
07:45	261	1013 196	1006 258	1132 192	819 519	2145 388	1825			
08:00	246	229	281	171	527	400				
08:15	245	208	279	171	524	379				
08:30	232	195	243	129	475	324				
08:45	200	923 193	825 195	998 145	616 395	1921 338	1441			
09:00	191	162	209	134	400	296				
09:15	181	147	197	126	378	273				
09:30	154	157	214	114	368	271				
09:45	162	688 121	587 207	827 112	486 369	1515 233	1073			
10:00	160	128	188	106	348	234				
10:15	187	110	202	84	389	194				
10:30	164	139	167	72	331	211				
10:45	201	712 90	467 195	752 55	317 396	1464 145	784			
11:00	201	74	164	62	365	136				
11:15	199	109	194	71	393	180				
11:30	215	70	201	55	416	125				
11:45	214	829 55	308 187	746 39	227 401	1575 94	535			
Total	5507	11456	6000	9601	11507	21057				
Percent	47.9%	54.4%	52.1%	45.6%						
Day Total		16963		15601		32564				
Peak	07:15	-	04:45	-	07:15	-	03:15	-	07:15	-
Vol.	1015	-	1449	-	1146	-	1156	-	2161	-
P.H.F.	0.954	-	0.908	-	0.893	-	0.944	-	0.960	-



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Winthrop Avenue (Route 145)  
west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 G Volume  
Site Code: 13796.00

Start	EB				WB				Combin ed		5/5/2017		
Time	A.M.	P.M.		A.M.	P.M.		A.M.	P.M.		Fri			
12:00	65		219	39		212	104		431				
12:15	54		234	28		211	82		445				
12:30	48		218	27		197	75		415				
12:45	49	216	254	925	25	119	235	855	74	335	489	1780	
01:00	48		240	29		239	77		479				
01:15	30		258	26		225	56		483				
01:30	27		233	22		233	49		466				
01:45	34	139	236	967	21	98	227	924	55	237	463	1891	
02:00	20		276		30		259		50		535		
02:15	27		282		25		239		52		521		
02:30	16		269		20		270		36		539		
02:45	29	92	336	1163	15	90	235	1003	44	182	571	2166	
03:00	13		332		20		253		33		585		
03:15	13		300		12		284		25		584		
03:30	13		322		13		291		26		613		
03:45	10	49	276	1230	21	66	288	1116	31	115	564	2346	
04:00	12		351		23		277		35		628		
04:15	9		323		23		270		32		593		
04:30	20		300		40		252		60		552		
04:45	11	52	354	1328	37	123	232	1031	48	175	586	2359	
05:00	22		334		60		309		82		643		
05:15	34		313		81		265		115		578		
05:30	53		357		112		276		165		633		
05:45	77	186	352	1356	90	343	249	1099	167	529	601	2455	
06:00	102		330		155		241		257		571		
06:15	135		273		158		257		293		530		
06:30	167		233		199		222		366		455		
06:45	192	596	257	1093	197	709	207	927	389	1305	464	2020	
07:00	239		251		242		197		481		448		
07:15	239		262		256		198		495		460		
07:30	230		224		309		177		539		401		
07:45	227	935	207	944	279	1086	163	735	506	2021	370	1679	
08:00	252		184		258		178		510		362		
08:15	243		165		271		160		514		325		
08:30	231		148		240		115		471		263		
08:45	187	913	135	632	179	948	124	577	366	1861	259	1209	
09:00	168		152		198		124		366		276		
09:15	159		148		176		127		335		275		
09:30	182		169		185		129		367		298		
09:45	186	695	125	594	198	757	125	505	384	1452	250	1099	
10:00	178		131		197		107		375		238		
10:15	181		123		197		116		378		239		
10:30	177		117		198		75		375		192		
10:45	183	719	123	494	184	776	92	390	367	1495	215	884	
11:00	220		90		198		90		418		180		
11:15	213		101		220		65		433		166		
11:30	254		101		185		58		439		159		
11:45	248	935	87	379	197	800	56	269	445	1735	143	648	
Total	5527		11105		5915		9431		11442		20536		
Percent	48.3%		54.1%		51.7%		45.9%						
Day Total		16632			15346			31978					
Peak	07:45	-	04:45	-	07:30	-	03:15	-	07:30	-	05:00	-	
Vol.	953	-	1358	-	1117	-	1140	-	2069	-	2455	-	
P.H.F.	0.945		0.951		0.904		0.979		0.960		0.955		





PRECISION  
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INDUSTRIES, LLC

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Winthrop Avenue (Route 145)  
west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 G Volume  
Site Code: 13796.00

Start	EB				WB				Combin ed		5/6/2017		
Time	A.M.	P.M.		A.M.	P.M.		A.M.	P.M.		Sat			
12:00	54		299	66		255	120		554				
12:15	81		269	48		232	129		501				
12:30	90		263	51		281	141		544				
12:45	48	273	318	1149	46	211	275	1043	94	484	593	2192	
01:00	63		344		50		280		113		624		
01:15	49		294		47		280		96		574		
01:30	46		306		35		266		81		572		
01:45	41	199	330	1274	31	163	276	1102	72	362	606	2376	
02:00	39		284		36		279		75		563		
02:15	39		349		30		304		69		653		
02:30	43		319		35		246		78		565		
02:45	46	167	279	1231	40	141	256	1085	86	308	535	2316	
03:00	31		320		35		291		66		611		
03:15	26		312		22		274		48		586		
03:30	23		286		16		293		39		579		
03:45	12	92	309	1227	13	86	287	1145	25	178	596	2372	
04:00	18		331		20		256		38		587		
04:15	23		307		18		286		41		593		
04:30	19		347		23		255		42		602		
04:45	15	75	317	1302	24	85	325	1122	39	160	642	2424	
05:00	17		279		19		262		36		541		
05:15	20		275		38		283		58		558		
05:30	19		263		42		270		61		533		
05:45	28	84	288	1105	51	150	270	1085	79	234	558	2190	
06:00	36		252		57		260		93		512		
06:15	45		240		81		234		126		474		
06:30	58		316		79		210		137		526		
06:45	78	217	237	1045	89	306	226	930	167	523	463	1975	
07:00	80		233		93		271		173		504		
07:15	79		253		101		285		180		538		
07:30	78		197		130		252		208		449		
07:45	94	331	231	914	123	447	173	981	217	778	404	1895	
08:00	112		195		118		189		230		384		
08:15	113		210		152		189		265		399		
08:30	121		185		163		145		284		330		
08:45	124	470	164	754	149	582	149	672	273	1052	313	1426	
09:00	146		204		160		161		306		365		
09:15	149		160		165		151		314		311		
09:30	171		186		168		170		339		356		
09:45	169	635	166	716	207	700	136	618	376	1335	302	1334	
10:00	184		135		192		110		376		245		
10:15	210		153		237		114		447		267		
10:30	210		127		241		111		451		238		
10:45	201	805	125	540	229	899	92	427	430	1704	217	967	
11:00	265		117		213		101		478		218		
11:15	219		112		259		77		478		189		
11:30	257		104		243		71		500		175		
11:45	277	1018	85	418	286	1001	68	317	563	2019	153	735	
Total	4366		11675		4771		10527		9137		22202		
Percent	47.8%		52.6%		52.2%		47.4%						
Day Total			16041				15298				31339		
Peak	11:00	-	04:00	-	11:00	-	03:00	-	11:00	-	04:00	-	
Vol.	1018	-	1302	-	1001	-	1145	-	2019	-	2424	-	
P.H.F.	0.919		0.938		0.875		0.942		0.897		0.928		



PRECISION  
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Winthrop Avenue (Route 145)  
west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 G Volume  
Site Code: 13796.00

Start	EB				WB				Combin ed		5/7/2017			
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		Sun	
12:00	78		278		63		276		141		554			
12:15	70		286		54		237		124		523			
12:30	70		268		52		250		122		518			
12:45	81	299	277	1109	40	209	270	1033	121	508	547	2142		
01:00	50		288		48		255		98		543			
01:15	70		291		37		256		107		547			
01:30	66		280		44		257		110		537			
01:45	61	247	344	1203	44	173	284	1052	105	420	628	2255		
02:00	45		329		56		286		101		615			
02:15	54		309		38		289		92		598			
02:30	41		300		43		300		84		600			
02:45	49	189	276	1214	44	181	287	1162	93	370	563	2376		
03:00	40		257		15		286		55		543			
03:15	30		287		34		265		64		552			
03:30	26		299		21		267		47		566			
03:45	17	113	260	1103	19	89	275	1093	36	202	535	2196		
04:00	12		269		16		239		28		508			
04:15	17		252		18		275		35		527			
04:30	9		281		12		236		21		517			
04:45	23	61	266	1068	23	69	246	996	46	130	512	2064		
05:00	12		293		23		169		35		462			
05:15	17		238		25		215		42		453			
05:30	17		270		42		206		59		476			
05:45	28	74	226	1027	34	124	214	804	62	198	440	1831		
06:00	26		252		27		202		53		454			
06:15	31		244		56		208		87		452			
06:30	37		258		55		197		92		455			
06:45	67	161	242	996	60	198	167	774	127	359	409	1770		
07:00	47		201		55		180		102		381			
07:15	67		240		75		197		142		437			
07:30	59		188		79		155		138		343			
07:45	74	247	210	839	82	291	189	721	156	538	399	1560		
08:00	113		201		85		177		198		378			
08:15	101		179		109		164		210		343			
08:30	91		169		108		116		199		285			
08:45	118	423	145	694	120	422	133	590	238	845	278	1284		
09:00	109		157		132		139		241		296			
09:15	141		140		167		104		308		244			
09:30	144		154		159		114		303		268			
09:45	175	569	95	546	139	597	95	452	314	1166	190	998		
10:00	167		115		189		96		356		211			
10:15	159		113		182		71		341		184			
10:30	184		98		198		86		382		184			
10:45	215	725	79	405	174	743	70	323	389	1468	149	728		
11:00	233		80		214		62		447		142			
11:15	223		60		213		37		436		97			
11:30	244		57		198		47		442		104			
11:45	303	1003	54	251	244	869	31	177	547	1872	85	428		
Total	4111		10455		3965		9177		8076		19632			
Percent	50.9%		53.3%		49.1%		46.7%							
Day Total			14566				13142				27708			
Peak	11:00	-	01:45	-	11:00	-	02:00	-	11:00	-	01:45	-	-	-
Vol.	1003	-	1282	-	869	-	1162	-	1872	-	2441	-	-	-
P.H.F.	0.828		0.932		0.890		0.968		0.856		0.972			



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west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 G Volume  
Site Code: 13796.00

Start	EB				WB				Combin ed		5/8/2017		
Time	A.M.	P.M.		A.M.	P.M.		A.M.	P.M.		Mon			
12:00	55	223		31	180		86	403					
12:15	42	238		26	195		68	433					
12:30	40	243		24	200		64	443					
12:45	39	176	188	892	16	97	203	778	55	273	391	1670	
01:00	20	218		31	184		51	402					
01:15	22	205		11	183		33	388					
01:30	24	243		14	207		38	450					
01:45	24	90	219	885	25	81	223	797	49	171	442	1682	
02:00	22	244		25	220		47	464					
02:15	20	246		18	210		38	456					
02:30	13	259		24	244		37	503					
02:45	13	68	305	1054	7	74	249	923	20	142	554	1977	
03:00	13	295		18	296		31	591					
03:15	15	273		13	278		28	551					
03:30	17	286		24	277		41	563					
03:45	6	51	303	1157	22	77	269	1120	28	128	572	2277	
04:00	13	325		22	261		35	586					
04:15	14	367		25	262		39	629					
04:30	17	314		37	265		54	579					
04:45	19	63	326	1332	43	127	249	1037	62	190	575	2369	
05:00	21	385		64	277		85	662					
05:15	32	328		73	273		105	601					
05:30	47	394		99	316		146	710					
05:45	69	169	338	1445	112	348	266	1132	181	517	604	2577	
06:00	83	315		145	239		228	554					
06:15	136	289		171	242		307	531					
06:30	199	275		242	213		441	488					
06:45	198	616	308	1187	203	761	214	908	401	1377	522	2095	
07:00	209	258		253	184		462	442					
07:15	243	236		249	201		492	437					
07:30	247	231		275	186		522	417					
07:45	257	956	189	914	286	1063	164	735	543	2019	353	1649	
08:00	248	197		275	136		523	333					
08:15	239	200		312	151		551	351					
08:30	208	146		245	142		453	288					
08:45	181	876	150	693	189	1021	104	533	370	1897	254	1226	
09:00	168	143		188	108		356	251					
09:15	167	151		188	108		355	259					
09:30	167	125		205	97		372	222					
09:45	143	645	111	530	205	786	105	418	348	1431	216	948	
10:00	161	101		184	79		345	180					
10:15	172	95		196	78		368	173					
10:30	187	90		181	54		368	144					
10:45	186	706	74	360	183	744	62	273	369	1450	136	633	
11:00	194	75		191	50		385	125					
11:15	183	58		179	54		362	112					
11:30	202	54		195	34		397	88					
11:45	263	842	58	245	185	750	23	161	448	1592	81	406	
Total	5258	10694		5929	8815		11187	19509					
Percent	47.0%	54.8%		53.0%	45.2%								
Day Total	15952		14744		30696								
Peak	07:15	-	05:00	-	07:30	-	05:00	-	07:30	-	05:00	-	
Vol.	995	-	1445	-	1148	-	1132	-	2139	-	2577	-	
P.H.F.	0.968	0.917		0.920		0.896		0.971		0.907			



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Winthrop Avenue (Route 145)  
west of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 G Volume  
Site Code: 13796.00

Start	EB		WB		Combin		ed		5/9/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Tue	
12:00	61	222	24	219	85	441				
12:15	43	200	25	171	68	371				
12:30	31	202	19	188	50	390				
12:45	26	161 213	837	28 195	773	54 408	1610			
01:00	22	206	17	206	39	412				
01:15	22	193	25	212	47	405				
01:30	26	233	9	210	35	443				
01:45	19	89 255	887	17 195	823	36 450	1710			
02:00	19	233	16	241	35	474				
02:15	11	231	9	258	20	489				
02:30	15	265	14	221	29	486				
02:45	13	58 270	999	9 208	928	22 478	1927			
03:00	10	270	13	290	23	560				
03:15	7	310	17	265	24	575				
03:30	11	266	14	276	25	542				
03:45	15	43 312	1158	16 249	1080	31 561	2238			
04:00	7	336	23	251	30	587				
04:15	14	316	25	260	39	576				
04:30	16	320	45	241	61	561				
04:45	15	52 357	1329	34 248	1000	49 605	2329			
05:00	36	374	68	302	104	676				
05:15	25	339	78	278	103	617				
05:30	46	327	112	295	158	622				
05:45	74	181 289	1329	109 285	1160	183 574	2489			
06:00	104	335	155	229	259	564				
06:15	164	274	179	217	343	491				
06:30	203	278	231	203	434	481				
06:45	236	707 248	1135	223 202	851	459 450	1986			
07:00	246	272	236	208	482	480				
07:15	296	256	273	201	569	457				
07:30	255	222	276	174	531	396				
07:45	251	1048 194	944	319 1104	138 721	570 2152	1665			
08:00	224	207	312	140	536	347				
08:15	229	167	287	132	516	299				
08:30	260	164	237	132	497	296				
08:45	232	945 179	717	215 1051	111 515	447 1996	1232			
09:00	181	158	187	153	368	311				
09:15	200	133	179	107	379	240				
09:30	202	128	212	106	414	234				
09:45	176	759 115	534	173 751	80 446	349 1510	980			
10:00	181	113	191	68	372	181				
10:15	173	123	175	84	348	207				
10:30	206	88	186	60	392	148				
10:45	204	764 86	410	189 741	50 262	393 1505	672			
11:00	186	79	183	69	369	148				
11:15	179	80	219	51	398	131				
11:30	183	73	179	45	362	118				
11:45	240	788 70	302	193 774	42 207	433 1562	509			
Total	5595	10581	5975	8766	11570	19347				
Percent	48.4%	54.7%	51.6%	45.3%						
Day Total		16176		14741		30917				
Peak	07:00	- 04:45	- 07:30	- 05:00	- 07:15	- 04:45	- -			
Vol.	1048	- 1397	- 1194	- 1160	- 2206	- 2520	- -			
P.H.F.	0.885	- 0.934	- 0.936	- 0.960	- 0.968	- 0.932	- -			



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175607 H Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/1														
7	170	2	1	0	0	0	0	0	0	0	0	0	0	173
01:00	109	0	0	0	0	0	0	0	0	0	0	0	0	109
02:00	67	1	0	0	0	0	0	0	0	0	0	0	0	68
03:00	47	3	0	0	0	0	0	0	0	0	0	0	0	50
04:00	54	0	0	0	0	0	0	0	0	0	0	0	0	54
05:00	178	4	0	0	0	0	0	0	0	0	0	0	0	182
06:00	559	15	0	0	0	0	0	0	0	0	0	0	0	574
07:00	882	15	5	0	0	0	0	0	0	0	0	0	0	902
08:00	899	26	2	0	0	0	0	0	0	0	0	0	0	927
09:00	717	33	0	0	0	0	0	0	0	0	0	0	0	750
10:00	732	20	1	0	0	0	0	0	0	0	0	0	0	753
11:00	898	23	0	0	0	0	0	0	0	0	0	0	0	921
12 PM	937	26	0	0	0	0	0	0	0	0	0	0	0	963
13:00	989	12	1	0	0	0	0	0	0	0	0	0	0	1002
14:00	1089	24	1	0	0	0	0	0	0	0	0	0	0	1114
15:00	1335	16	0	0	0	0	0	0	0	0	0	0	0	1351
16:00	1364	14	1	0	0	0	0	0	0	0	0	0	0	1379
17:00	1547	11	0	0	0	0	0	0	0	0	0	0	0	1558
18:00	1382	10	0	0	0	0	0	0	0	0	0	0	0	1392
19:00	1059	8	0	0	0	0	0	0	0	0	0	0	0	1067
20:00	828	2	0	0	0	0	0	0	0	0	0	0	0	830
21:00	697	6	0	0	0	0	0	0	0	0	0	0	0	703
22:00	503	2	0	0	0	0	0	0	0	0	0	0	0	505
23:00	312	1	0	0	0	0	0	0	0	0	0	0	0	313
Total	17354	274	12	0	0	0	0	0	0	0	0	0	0	17640
Percent	98.4%	1.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	09:00	07:00											08:00
Vol.	899	33	5											927
PM Peak	17:00	12:00	13:00											17:00
Vol.	1547	26	1											1558



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175607 H Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/17														
7:00	211	3	1	0	0	0	0	0	0	0	0	0	0	215
01:00	108	0	1	0	0	0	0	0	0	0	0	0	0	109
02:00	54	2	0	0	0	0	0	0	0	0	0	0	0	56
03:00	44	1	1	0	0	0	0	0	0	0	0	0	0	46
04:00	63	5	0	0	0	0	0	0	0	0	0	0	0	68
05:00	199	5	0	0	0	0	0	0	0	0	0	0	0	204
06:00	538	19	0	0	0	0	0	0	0	0	0	0	0	557
07:00	886	40	1	0	0	0	0	0	0	0	0	0	0	927
08:00	861	22	1	0	0	0	0	0	0	0	0	0	0	884
09:00	658	28	0	0	0	0	0	0	0	0	0	0	0	686
10:00	720	20	0	0	0	0	0	0	0	0	0	0	0	740
11:00	821	18	0	0	0	0	0	0	0	0	0	0	0	839
12 PM	923	13	0	0	0	0	0	0	0	0	0	0	0	936
13:00	965	20	1	0	0	0	0	0	0	0	0	0	0	986
14:00	1180	29	0	0	0	0	0	0	0	0	0	0	0	1209
15:00	1371	25	0	0	0	0	0	0	0	0	0	0	0	1396
16:00	1558	21	0	0	0	0	0	0	0	0	0	0	0	1579
17:00	1674	10	0	0	0	0	0	0	0	0	0	0	0	1684
18:00	1399	4	0	0	0	0	0	0	0	0	0	0	0	1403
19:00	1100	6	0	0	0	0	0	0	0	0	0	0	0	1106
20:00	910	8	0	0	0	0	0	0	0	0	0	0	0	918
21:00	670	5	0	0	0	0	0	0	0	0	0	0	0	675
22:00	524	6	0	0	0	0	0	0	0	0	0	0	0	530
23:00	331	2	1	0	0	0	0	0	0	0	0	0	0	334
Total	17768	312	7	0	0	0	0	0	0	0	0	0	0	18087
Percent	98.2%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	00:00											07:00
Vol.	886	40	1											927
PM Peak	17:00	14:00	13:00											17:00
Vol.	1674	29	1											1684



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175607 H Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	223	1	1	0	0	0	0	0	0	0	0	0	0	225
01:00	152	0	0	0	0	0	0	0	0	0	0	0	0	152
02:00	87	0	0	0	0	0	0	0	0	0	0	0	0	87
03:00	47	2	0	0	0	0	0	0	0	0	0	0	0	49
04:00	53	1	0	0	0	0	0	0	0	0	0	0	0	54
05:00	173	6	0	0	0	0	0	0	0	0	0	0	0	179
06:00	506	10	1	0	0	0	0	0	0	0	0	0	0	517
07:00	799	26	0	0	0	0	0	0	0	0	0	0	0	825
08:00	815	17	3	0	0	0	0	0	0	0	0	0	0	835
09:00	643	33	0	0	0	0	0	0	0	0	0	0	0	676
10:00	697	18	0	0	0	0	0	0	0	0	0	0	0	715
11:00	930	13	0	0	0	0	0	0	0	0	0	0	0	943
12 PM	962	13	0	0	0	0	0	0	0	0	0	0	0	975
13:00	1012	23	0	0	0	0	0	0	0	0	0	0	0	1035
14:00	1191	26	1	0	0	0	0	0	0	0	0	0	0	1218
15:00	1392	11	0	0	0	0	0	0	0	0	0	0	0	1403
16:00	1451	16	1	0	0	0	0	0	0	0	0	0	0	1468
17:00	1547	14	0	0	0	0	0	0	0	0	0	0	0	1561
18:00	1204	8	0	0	0	0	0	0	0	0	0	0	0	1212
19:00	1037	2	0	0	0	0	0	0	0	0	0	0	0	1039
20:00	721	8	0	0	0	0	0	0	0	0	0	0	0	729
21:00	640	4	1	0	0	0	0	0	0	0	0	0	0	645
22:00	556	3	0	0	0	0	0	0	0	0	0	0	0	559
23:00	413	1	0	0	0	0	0	0	0	0	0	0	0	414
Total	17251	256	8	0	0	0	0	0	0	0	0	0	0	17515
Percent	98.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	08:00											11:00
Vol.	930	33	3											943
PM Peak	17:00	14:00	14:00											17:00
Vol.	1547	26	1											1561



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175607 H Class  
Site Code: 13796.00

[illegible]





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175607 H Class  
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[illegible]



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175607 H Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/1														
7	186	1	0	0	0	0	0	0	0	0	0	0	0	187
01:00	93	0	0	0	0	0	0	0	0	0	0	0	0	93
02:00	66	2	0	0	0	0	0	0	0	0	0	0	0	68
03:00	48	2	0	0	0	0	0	0	0	0	0	0	0	50
04:00	58	3	0	0	0	0	0	0	0	0	0	0	0	61
05:00	157	4	0	0	0	0	0	0	0	0	0	0	0	161
06:00	515	13	0	0	0	0	0	0	0	0	0	0	0	528
07:00	865	29	0	0	0	0	0	0	0	0	0	0	0	894
08:00	813	26	0	0	0	0	0	0	0	0	0	0	0	839
09:00	617	29	0	0	0	0	0	0	0	0	0	0	0	646
10:00	691	25	0	0	0	0	0	0	0	0	0	0	0	716
11:00	854	22	2	0	0	0	0	0	0	0	0	0	0	878
12 PM	915	23	0	0	0	0	0	0	0	0	0	0	0	938
13:00	980	16	0	0	0	0	0	0	0	0	0	0	0	996
14:00	1108	36	1	0	0	0	0	0	0	0	0	0	0	1145
15:00	1306	30	0	0	0	0	0	0	0	0	0	0	0	1336
16:00	1481	15	1	0	0	0	0	0	0	0	0	0	0	1497
17:00	1640	14	0	0	0	0	0	0	0	0	0	0	0	1654
18:00	1344	10	0	0	0	0	0	0	0	0	0	0	0	1354
19:00	1068	3	0	0	0	0	0	0	0	0	0	0	0	1071
20:00	756	4	0	0	0	0	0	0	0	0	0	0	0	760
21:00	626	1	0	0	0	0	0	0	0	0	0	0	0	627
22:00	419	2	0	0	0	0	0	0	0	0	0	0	0	421
23:00	272	1	0	0	0	0	0	0	0	0	0	0	0	273
Total	16878	311	4	0	0	0	0	0	0	0	0	0	0	17193
Percent	98.2%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	11:00											07:00
Vol.	865	29	2											894
PM Peak	17:00	14:00	14:00											17:00
Vol.	1640	36	1											1654



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175607 H Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/17														
7:00	168	1	0	0	0	0	0	0	0	0	0	0	0	169
01:00	92	0	0	0	0	0	0	0	0	0	0	0	0	92
02:00	53	2	0	0	0	0	0	0	0	0	0	0	0	55
03:00	43	1	0	0	0	0	0	0	0	0	0	0	0	44
04:00	50	3	0	0	0	0	0	0	0	0	0	0	0	53
05:00	166	5	1	0	0	0	0	0	0	0	0	0	0	172
06:00	610	11	0	0	0	0	0	0	0	0	0	0	0	621
07:00	872	34	0	0	0	0	0	0	0	0	0	0	0	906
08:00	876	29	6	0	0	0	0	0	0	0	0	0	0	911
09:00	734	26	1	0	0	0	0	0	0	0	0	0	0	761
10:00	746	30	1	0	0	0	0	0	0	0	0	0	0	777
11:00	781	23	1	0	0	0	0	0	0	0	0	0	0	805
12 PM	859	18	1	0	0	0	0	0	0	0	0	0	0	878
13:00	953	26	0	0	0	0	0	0	0	0	0	0	0	979
14:00	1050	37	0	0	0	0	0	0	0	0	0	0	0	1087
15:00	1311	24	0	0	0	0	0	0	0	0	0	0	0	1335
16:00	1505	19	0	0	0	0	0	0	0	0	0	0	0	1524
17:00	1573	10	0	0	0	0	0	0	0	0	0	0	0	1583
18:00	1278	5	0	0	0	0	0	0	0	0	0	0	0	1283
19:00	1039	7	0	0	0	0	0	0	0	0	0	0	0	1046
20:00	783	3	0	0	0	0	0	0	0	0	0	0	0	786
21:00	639	3	1	0	0	0	0	0	0	0	0	0	0	643
22:00	463	3	0	0	0	0	0	0	0	0	0	0	0	466
23:00	317	1	1	0	0	0	0	0	0	0	0	0	0	319
Total	16961	321	13	0	0	0	0	0	0	0	0	0	0	17295
Percent	98.1%	1.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	07:00	08:00											08:00
Vol.	876	34	6											911
PM Peak	17:00	14:00	12:00											17:00
Vol.	1573	37	1											1583



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175607 H Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/1														
7	105	0	0	0	0	0	0	0	0	0	0	0	0	105
01:00	83	0	0	0	0	0	0	0	0	0	0	0	0	83
02:00	60	2	0	0	0	0	0	0	0	0	0	0	0	62
03:00	58	2	0	0	0	0	0	0	0	0	0	0	0	60
04:00	120	2	0	0	0	0	0	0	0	0	0	0	0	122
05:00	350	5	0	0	0	0	0	0	0	0	0	0	0	355
06:00	817	13	1	0	0	0	0	0	0	0	0	0	0	831
07:00	1308	28	2	0	0	0	0	0	0	0	0	0	0	1338
08:00	1082	22	2	0	0	0	0	0	0	0	0	0	0	1106
09:00	839	26	0	0	0	0	0	0	0	0	0	0	0	865
10:00	771	20	3	0	0	0	0	0	0	0	0	0	0	794
11:00	776	22	1	0	0	0	0	0	0	0	0	0	0	799
12 PM	917	30	2	0	0	0	0	0	0	0	0	0	0	949
13:00	835	27	1	0	0	0	0	0	0	0	0	0	0	863
14:00	847	23	0	0	0	0	0	0	0	0	0	0	0	870
15:00	973	19	1	0	0	0	0	0	0	0	0	0	0	993
16:00	926	13	0	0	0	0	0	0	0	0	0	0	0	939
17:00	1021	9	0	0	0	0	0	0	0	0	0	0	0	1030
18:00	863	7	0	0	0	0	0	0	0	0	0	0	0	870
19:00	696	4	0	0	0	0	0	0	0	0	0	0	0	700
20:00	558	5	0	0	0	0	0	0	0	0	0	0	0	563
21:00	390	3	0	0	0	0	0	0	0	0	0	0	0	393
22:00	288	2	0	0	0	0	0	0	0	0	0	0	0	290
23:00	201	0	0	0	0	0	0	0	0	0	0	0	0	201
Total	14884	284	13	0	0	0	0	0	0	0	0	0	0	15181
Percent	98.0%	1.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	10:00											07:00
Vol.	1308	28	3											1338
PM Peak	17:00	12:00	12:00											17:00
Vol.	1021	30	2											1030



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175607 H Class  
Site Code: 13796.00

[illegible]



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	113	2	3	0	0	0	0	0	0	0	0	0	0	118
01:00	101	0	0	0	0	0	0	0	0	0	0	0	0	101
02:00	88	1	0	0	0	0	0	0	0	0	0	0	0	89
03:00	68	0	0	0	0	0	0	0	0	0	0	0	0	68
04:00	126	3	0	0	0	0	0	0	0	0	0	0	0	129
05:00	335	6	0	0	0	0	0	0	0	0	0	0	0	341
06:00	771	18	0	0	0	0	0	0	0	0	0	0	0	789
07:00	1182	26	1	0	0	0	0	0	0	0	0	0	0	1209
08:00	1007	24	1	0	0	0	0	0	0	0	0	0	0	1032
09:00	764	29	0	0	0	0	0	0	0	0	0	0	0	793
10:00	754	28	1	0	0	0	0	0	0	0	0	0	0	783
11:00	819	18	2	0	0	0	0	0	0	0	0	0	0	839
12 PM	800	30	1	0	0	0	0	0	0	0	0	0	0	831
13:00	834	20	0	0	0	0	0	0	0	0	0	0	0	854
14:00	894	22	0	0	0	0	0	0	0	0	0	0	0	916
15:00	996	16	1	0	0	0	0	0	0	0	0	0	0	1013
16:00	881	19	0	0	0	0	0	0	0	0	0	0	0	900
17:00	944	12	0	0	0	0	0	0	0	0	0	0	0	956
18:00	807	7	0	0	0	0	0	0	0	0	0	0	0	814
19:00	635	4	0	0	0	0	0	0	0	0	0	0	0	639
20:00	479	3	0	0	0	0	0	0	0	0	0	0	0	482
21:00	417	3	1	0	0	0	0	0	0	0	0	0	0	421
22:00	344	5	0	0	0	0	0	0	0	0	0	0	0	349
23:00	256	0	0	0	0	0	0	0	0	0	0	0	0	256
Total	14415	296	11	0	0	0	0	0	0	0	0	0	0	14722
Percent	97.9%	2.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	09:00	00:00											07:00
Vol.	1182	29	3											1209
PM Peak	15:00	12:00	12:00											15:00
Vol.	996	30	1											1013



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175607 H Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	210	1	0	0	0	0	0	0	0	0	0	0	0	211
01:00	162	0	0	0	0	0	0	0	0	0	0	0	0	162
02:00	123	1	0	0	0	0	0	0	0	0	0	0	0	124
03:00	88	0	0	0	0	0	0	0	0	0	0	0	0	88
04:00	87	1	0	0	0	0	0	0	0	0	0	0	0	88
05:00	146	2	0	0	0	0	0	0	0	0	0	0	0	148
06:00	304	9	0	0	0	0	0	0	0	0	0	0	0	313
07:00	451	9	0	0	0	0	0	0	0	0	0	0	0	460
08:00	618	9	0	0	0	0	0	0	0	0	0	0	0	627
09:00	764	7	1	0	0	0	0	0	0	0	0	0	0	772
10:00	918	8	0	0	0	0	0	0	0	0	0	0	0	926
11:00	1003	9	0	0	0	0	0	0	0	0	0	0	0	1012
12 PM	971	9	0	0	0	0	0	0	0	0	0	0	0	980
13:00	964	11	0	0	0	0	0	0	0	0	0	0	0	975
14:00	928	6	0	0	0	0	0	0	0	0	0	0	0	934
15:00	935	9	0	0	0	0	0	0	0	0	0	0	0	944
16:00	911	7	0	0	0	0	0	0	0	0	0	0	0	918
17:00	879	3	0	0	0	0	0	0	0	0	0	0	0	882
18:00	813	5	0	0	0	0	0	0	0	0	0	0	0	818
19:00	696	4	0	0	0	0	0	0	0	0	0	0	0	700
20:00	544	1	0	0	0	0	0	0	0	0	0	0	0	545
21:00	470	4	0	0	0	0	0	0	0	0	0	0	0	474
22:00	395	1	0	0	0	0	0	0	0	0	0	0	0	396
23:00	311	1	0	0	0	0	0	0	0	0	0	0	0	312
Total	13691	117	1	0	0	0	0	0	0	0	0	0	0	13809
Percent	99.1%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	06:00	09:00											11:00
Vol.	1003	9	1											1012
PM Peak	12:00	13:00												12:00
Vol.	971	11												980



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175607 H Class  
Site Code: 13796.00

[illegible]





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175607 H Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	97	0	1	0	0	0	0	0	0	0	0	0	0	98
01:00	77	0	0	0	0	0	0	0	0	0	0	0	0	77
02:00	73	3	0	0	0	0	0	0	0	0	0	0	0	76
03:00	71	1	1	0	0	0	0	0	0	0	0	0	0	73
04:00	127	2	0	0	0	0	0	0	0	0	0	0	0	129
05:00	365	3	0	0	0	0	0	0	0	0	0	0	0	368
06:00	844	14	0	0	0	0	0	0	0	0	0	0	0	858
07:00	1189	39	1	0	0	0	0	0	0	0	0	0	0	1229
08:00	1106	29	0	0	0	0	0	0	0	0	0	0	0	1135
09:00	806	24	2	0	0	0	0	0	0	0	0	0	0	832
10:00	761	16	1	0	0	0	0	0	0	0	0	0	0	778
11:00	742	26	3	0	0	0	0	0	0	0	0	0	0	771
12 PM	751	19	0	0	0	0	0	0	0	0	0	0	0	770
13:00	781	19	0	0	0	0	0	0	0	0	0	0	0	800
14:00	852	43	1	0	0	0	0	0	0	0	0	0	0	896
15:00	1017	30	0	0	0	0	0	0	0	0	0	0	0	1047
16:00	940	17	1	0	0	0	0	0	0	0	0	0	0	958
17:00	1051	14	0	0	0	0	0	0	0	0	0	0	0	1065
18:00	838	13	0	0	0	0	0	0	0	0	0	0	0	851
19:00	654	7	0	0	0	0	0	0	0	0	0	0	0	661
20:00	505	7	0	0	0	0	0	0	0	0	0	0	0	512
21:00	377	1	0	0	0	0	0	0	0	0	0	0	0	378
22:00	251	2	0	0	0	0	0	0	0	0	0	0	0	253
23:00	142	0	0	0	0	0	0	0	0	0	0	0	0	142
Total	14417	329	11	0	0	0	0	0	0	0	0	0	0	14757
Percent	97.7%	2.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	11:00											07:00
Vol.	1189	39	3											1229
PM Peak	17:00	14:00	14:00											17:00
Vol.	1051	43	1											1065



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/17														
7:00	102	0	0	0	0	0	0	0	0	0	0	0	0	102
01:00	62	0	0	0	0	0	0	0	0	0	0	0	0	62
02:00	43	2	0	0	0	0	0	0	0	0	0	0	0	45
03:00	57	2	0	0	0	0	0	0	0	0	0	0	0	59
04:00	129	2	0	0	0	0	0	0	0	0	0	0	0	131
05:00	355	6	0	0	0	0	0	0	0	0	0	0	0	361
06:00	884	9	0	0	0	0	0	0	0	0	0	0	0	893
07:00	1242	37	1	0	0	0	0	0	0	0	0	0	0	1280
08:00	1130	28	2	0	0	0	0	0	0	0	0	0	0	1160
09:00	755	25	1	0	0	0	0	0	0	0	0	0	0	781
10:00	702	29	6	0	0	0	0	0	0	0	0	0	0	737
11:00	736	26	0	0	0	0	0	0	0	0	0	0	0	762
12 PM	765	23	0	0	0	0	0	0	0	0	0	0	0	788
13:00	774	26	1	0	0	0	0	0	0	0	0	0	0	801
14:00	851	35	0	0	0	0	0	0	0	0	0	0	0	886
15:00	977	25	0	0	0	0	0	0	0	0	0	0	0	1002
16:00	940	22	0	0	0	0	0	0	0	0	0	0	0	962
17:00	1042	11	2	0	0	0	0	0	0	0	0	0	0	1055
18:00	794	12	1	0	0	0	0	0	0	0	0	0	0	807
19:00	651	3	0	0	0	0	0	0	0	0	0	0	0	654
20:00	440	1	0	0	0	0	0	0	0	0	0	0	0	441
21:00	406	3	1	0	0	0	0	0	0	0	0	0	0	410
22:00	245	2	1	0	0	0	0	0	0	0	0	0	0	248
23:00	189	0	0	0	0	0	0	0	0	0	0	0	0	189
Total	14271	329	16	0	0	0	0	0	0	0	0	0	0	14616
Percent	97.6%	2.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	10:00											07:00
Vol.	1242	37	6											1280
PM Peak	17:00	14:00	17:00											17:00
Vol.	1042	35	2											1055



PRECISION  
D A T A  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Winthrop Avenue (Route 145)  
east of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 H Volume  
Site Code: 13796.00

Start Time	5/3/2017		5/4/2017		5/5/2017		5/6/2017		5/7/2017		5/8/2017		5/9/2017		Week Average	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	173	105	215	113	225	118	299	211	326	206	187	98	169	102	228	136
01:00	109	83	109	71	152	101	206	162	256	186	93	77	92	62	145	106
02:00	68	62	56	62	87	89	165	124	205	182	68	76	55	45	101	91
03:00	50	60	46	63	49	68	98	88	116	90	50	73	44	59	65	72
04:00	54	122	68	117	54	129	75	88	59	73	61	129	53	131	61	113
05:00	182	355	204	350	179	341	83	148	71	122	161	368	172	361	150	292
06:00	574	831	557	870	517	789	191	313	145	206	528	858	621	893	448	680
07:00	902	1338	927	1275	825	1209	311	460	235	322	894	1229	906	1280	714	1016
08:00	927	1106	884	1089	835	1032	463	627	447	461	839	1135	911	1160	758	944
09:00	750	865	686	857	676	793	591	772	603	671	646	832	761	781	673	796
10:00	753	794	740	796	715	783	769	926	741	818	716	778	777	737	744	805
11:00	921	799	839	769	943	839	952	1012	1013	931	878	771	805	762	907	840
12:00 PM	963	949	936	831	975	831	1093	980	1124	1035	938	770	878	788	987	883
01:00	1002	863	986	854	1035	854	1211	975	1197	1038	996	800	979	801	1058	884
02:00	1114	870	1209	953	1218	916	1246	934	1281	1065	1145	896	1087	886	1186	931
03:00	1351	993	1396	1092	1403	1013	1281	944	1195	979	1336	1047	1335	1002	1328	1010
04:00	1379	939	1579	1007	1468	900	1337	918	1141	880	1497	958	1524	962	1418	938
05:00	1558	1030	1684	1044	1561	956	1179	882	1177	713	1654	1065	1583	1055	1485	964
06:00	1392	870	1403	971	1212	814	1102	818	1042	685	1354	851	1283	807	1255	831
07:00	1067	700	1106	725	1039	639	1080	700	900	654	1071	661	1046	654	1044	676
08:00	830	563	918	518	729	482	847	545	780	510	760	512	786	441	807	510
09:00	703	393	675	400	645	421	773	474	618	403	627	378	643	410	669	411
10:00	505	290	530	291	559	349	602	396	436	292	421	253	466	248	503	303
11:00	313	201	334	215	414	256	472	312	282	172	273	142	319	189	344	212
Total Day	17640	15181	18087	15333	17515	14722	16426	13809	15390	12694	17193	14757	17295	14616	17078	14444
	32821		33420		32237		30235		28084		31950		31911		31522	
AM Peak	08:00	07:00	07:00	07:00	11:00	07:00	11:00	11:00	11:00	11:00	07:00	07:00	08:00	07:00	11:00	07:00
Vol.	927	1338	927	1275	943	1209	952	1012	1013	931	894	1229	911	1280	907	1016
PM Peak	17:00	17:00	17:00	15:00	17:00	15:00	16:00	12:00	14:00	14:00	17:00	17:00	17:00	17:00	17:00	15:00
Vol.	1558	1030	1684	1092	1561	1013	1337	980	1281	1065	1654	1065	1583	1055	1485	1010

Comb. Total	32821	33420	32237	30235	28084	31950	31911	31522
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ADT	ADT 31,523	AADT 31,523
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Winthrop Avenue (Route 145)  
east of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 H Volume  
Site Code: 13796.00

Start	EB		WB		Combin ed		5/3/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Wed	
12:00	55	242	28	213	83	455		
12:15	57	241	27	236	84	477		
12:30	36	243	30	267	66	510		
12:45	25	237	20	233	45	470	1912	
01:00	27	227	25	244	52	471		
01:15	30	272	18	233	48	505		
01:30	25	249	21	190	46	439		
01:45	27	254	19	196	46	450	1865	
02:00	21	249	10	226	31	475		
02:15	13	249	16	222	29	471		
02:30	17	289	15	199	32	488		
02:45	17	327	21	223	38	550	1984	
03:00	18	333	16	245	34	578		
03:15	4	363	10	253	14	616		
03:30	16	337	14	268	30	605		
03:45	12	318	20	227	32	545	2344	
04:00	8	323	22	231	30	554		
04:15	11	344	30	253	41	597		
04:30	12	349	34	213	46	562		
04:45	23	363	36	242	59	605	2318	
05:00	29	393	66	263	95	656		
05:15	36	415	66	285	102	700		
05:30	45	370	103	254	148	624		
05:45	72	380	120	228	192	608	2588	
06:00	68	367	161	236	229	603		
06:15	161	382	197	219	358	601		
06:30	167	332	222	215	389	547		
06:45	178	311	251	200	429	511	2262	
07:00	203	296	310	193	513	489		
07:15	231	285	359	166	590	451		
07:30	235	242	348	185	583	427		
07:45	233	244	321	156	554	400	1767	
08:00	253	203	304	159	557	362		
08:15	265	203	324	146	589	349		
08:30	208	197	243	111	451	308		
08:45	201	227	235	147	436	374	1393	
09:00	212	195	205	114	417	309		
09:15	165	174	229	110	394	284		
09:30	202	163	210	89	412	252		
09:45	171	171	221	80	393	251	1096	
10:00	195	146	212	80	407	226		
10:15	180	131	196	93	376	224		
10:30	204	114	215	67	419	181		
10:45	174	114	171	50	345	164	795	
11:00	224	83	188	62	412	145		
11:15	217	95	195	55	412	150		
11:30	229	67	201	51	430	118		
11:45	251	68	215	799	33	201	514	
Total	5463	12177	6520	8661	11983	20838		
Percent	45.6%	58.4%	54.4%	41.6%				
Day Total	17640		15181		32821			
Peak	07:30	-	05:00	-	07:00	-	04:45	-
Vol.	986	-	1558	-	1338	-	1044	-
P.H.F.	0.930	-	0.939	-	0.932	-	0.916	-

Winthrop Avenue (Route 145)  
east of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 H Volume  
Site Code: 13796.00

Start	EB		WB		Combin ed		5/4/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Thu	
12:00	71	189	35	204	106	393		
12:15	48	244	22	196	70	440		
12:30	50	243	27	218	77	461		
12:45	46	215 260	936 29	113 213	831 75	328 473	1767	
01:00	27	230	21	226	48	456		
01:15	33	261	23	192	56	453		
01:30	24	262	13	239	37	501		
01:45	25	109 233	986 14	71 197	854 39	180 430	1840	
02:00	15	286	20	244	35	530		
02:15	12	282	14	236	26	518		
02:30	11	291	15	222	26	513		
02:45	18	56 350	1209 13	62 251	953 31	118 601	2162	
03:00	17	334	14	265	31	599		
03:15	17	329	14	275	31	604		
03:30	7	376	16	283	23	659		
03:45	5	46 357	1396 19	63 269	1092 24	109 626	2488	
04:00	8	354	16	251	24	605		
04:15	20	410	33	242	53	652		
04:30	18	405	33	278	51	683		
04:45	22	68 410	1579 35	117 236	1007 57	185 646	2586	
05:00	42	416	59	241	101	657		
05:15	46	412	78	246	124	658		
05:30	51	439	105	288	156	727		
05:45	65	204 417	1684 108	350 269	1044 173	554 686	2728	
06:00	90	361	155	265	245	626		
06:15	129	361	194	238	323	599		
06:30	150	351	254	249	404	600		
06:45	188	557 330	1403 267	870 219	971 455	1427 549	2374	
07:00	212	288	302	217	514	505		
07:15	240	276	315	181	555	457		
07:30	229	302	362	161	591	463		
07:45	246	927 240	1106 296	1275 166	725 542	2202 406	1831	
08:00	231	275	313	134	544	409		
08:15	233	232	309	158	542	390		
08:30	218	210	262	108	480	318		
08:45	202	884 201	918 205	1089 118	518 407	1973 319	1436	
09:00	191	181	205	93	396	274		
09:15	181	177	204	109	385	286		
09:30	156	180	238	107	394	287		
09:45	158	686 137	675 210	857 91	400 368	1543 228	1075	
10:00	169	146	212	92	381	238		
10:15	188	136	216	80	404	216		
10:30	177	145	171	69	348	214		
10:45	206	740 103	530 197	796 50	291 403	1536 153	821	
11:00	207	84	185	59	392	143		
11:15	198	114	198	67	396	181		
11:30	206	74	198	51	404	125		
11:45	228	839 62	334 188	769 38	215 416	1608 100	549	
Total	5331	12756	6432	8901	11763	21657		
Percent	45.3%	58.9%	54.7%	41.1%				
Day Total	18087		15333		33420			
Peak	07:15	-	05:00	-	07:15	-	05:00	-
Vol.	946	-	1684	-	1286	-	1092	-
P.H.F.	0.961	-	0.959	-	0.888	-	0.965	-

Winthrop Avenue (Route 145)  
 east of Tomasello Drive  
 City, State: Revere, MA  
 Client: VHB/ A. Berthaume

175607 H Volume  
 Site Code: 13796.00

Start	EB		WB		Combin ed		5/5/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	63	230	37	229	100	459		
12:15	58	265	26	205	84	470		
12:30	51	226	32	186	83	412		
12:45	53	254	23	211	76	465	1806	
01:00	54	259	31	237	85	496		
01:15	33	256	26	207	59	463		
01:30	28	248	23	199	51	447		
01:45	37	272	21	211	58	483	1889	
02:00	19	296	27	234	46	530		
02:15	29	307	25	206	54	513		
02:30	17	302	19	253	36	555		
02:45	22	313	18	223	40	536	2134	
03:00	11	375	22	227	33	602		
03:15	14	343	11	271	25	614		
03:30	13	367	13	256	26	623		
03:45	11	318	22	259	33	577	2416	
04:00	12	374	26	246	38	620		
04:15	10	346	25	227	35	573		
04:30	21	368	40	205	61	573		
04:45	11	380	38	222	49	602	2368	
05:00	26	388	56	252	82	640		
05:15	35	391	78	248	113	639		
05:30	50	399	114	242	164	641		
05:45	68	383	93	214	161	597	2517	
06:00	96	356	155	224	251	580		
06:15	118	293	181	203	299	496		
06:30	143	266	231	200	374	466		
06:45	160	297	222	187	382	484	2026	
07:00	198	298	289	163	487	461		
07:15	206	286	273	185	479	471		
07:30	223	229	341	153	564	382		
07:45	198	226	306	138	504	364	1678	
08:00	221	209	287	163	508	372		
08:15	214	191	297	138	511	329		
08:30	224	181	247	83	471	264		
08:45	176	148	201	98	377	246	1211	
09:00	172	164	207	93	379	257		
09:15	157	163	194	112	351	275		
09:30	185	182	192	104	377	286		
09:45	162	136	200	112	362	248	1066	
10:00	165	158	210	95	375	253		
10:15	189	139	201	106	390	245		
10:30	161	135	199	65	360	200		
10:45	200	127	173	83	373	210	908	
11:00	220	101	216	82	436	183		
11:15	205	106	210	60	415	166		
11:30	263	111	202	56	465	167		
11:45	255	96	211	58	466	154	670	
Total	5257	12258	6291	8431	11548	20689		
Percent	45.5%	59.2%	54.5%	40.8%				
Day Total		17515		14722		32237		
Peak	11:00	-	05:00	-	07:30	-	04:45	-
Vol.	943	-	1561	-	1231	-	2522	-
P.H.F.	0.896	-	0.978	-	0.902	-	0.984	-

Winthrop Avenue (Route 145)  
 east of Tomasello Drive  
 City, State: Revere, MA  
 Client: VHB/ A. Berthaume

175607 H Volume  
 Site Code: 13796.00

Start	EB		WB		Combin ed		5/6/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sat	
12:00	66	262	66	238	132	500		
12:15	84	265	47	228	131	493		
12:30	94	264	50	258	144	522		
12:45	55	299	302	1093	48	211	256	980
01:00	66	303	50	256	116	558	510	2073
01:15	54	293	47	263	101	559		
01:30	45	297	33	217	78	556		
01:45	41	206	318	1211	32	162	239	975
02:00	42	303	36	237	78	557	368	2186
02:15	38	333	28	260	66	540		
02:30	38	300	32	215	70	593		
02:45	47	165	310	1246	28	124	222	934
03:00	33	337	34	251	67	515	289	2180
03:15	30	319	24	230	54	588		
03:30	24	299	15	235	39	549		
03:45	11	98	326	1281	15	88	228	944
04:00	18	332	21	217	39	554	186	2225
04:15	24	339	20	226	44	549		
04:30	19	332	23	232	42	564		
04:45	14	75	334	1337	24	88	243	918
05:00	18	301	16	235	34	577	163	2255
05:15	22	285	37	226	59	536		
05:30	15	287	43	206	58	511		
05:45	28	83	306	1179	52	148	215	882
06:00	35	296	58	204	93	493	231	2061
06:15	40	265	85	211	125	500		
06:30	51	290	78	199	129	476		
06:45	65	191	251	1102	92	313	204	818
07:00	68	297	99	181	167	489	504	1920
07:15	76	317	102	167	178	478		
07:30	77	224	141	205	218	484		
07:45	90	311	242	1080	118	460	147	700
08:00	98	208	130	159	228	429	771	1780
08:15	110	223	168	131	278	367		
08:30	120	215	173	122	293	354		
08:45	135	463	201	847	156	627	133	545
09:00	137	206	186	117	323	337	1090	1392
09:15	150	180	185	120	335	323		
09:30	164	195	182	127	346	300		
09:45	140	591	192	773	219	772	110	474
10:00	166	159	194	99	360	322	1363	1247
10:15	207	158	237	105	444	258		
10:30	193	151	242	106	435	263		
10:45	203	769	134	602	253	926	86	396
11:00	246	134	227	97	473	220	1695	998
11:15	226	124	247	79	473	231		
11:30	222	119	275	69	497	203		
11:45	258	952	95	472	263	1012	67	312
Total	4203	12223	4931	8878	9134	21101		
Percent	46.0%	57.9%	54.0%	42.1%				
Day Total		16426		13809		30235		
Peak	11:00	-	04:00	-	11:00	-	04:00	-
Vol.	952	-	1337	-	1012	-	1033	-
P.H.F.	0.922	-	0.986	-	0.920	-	0.982	-

Winthrop Avenue (Route 145)  
east of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 H Volume  
Site Code: 13796.00

Start	EB				WB				Combin ed		5/7/2017		
Time	A.M.	P.M.		A.M.	P.M.		A.M.	P.M.		Sun			
12:00	79		271	64		265	143		536				
12:15	86		300	55		245	141		545				
12:30	77		271	50		267	127		538				
12:45	84	326	282	1124	37	206	258	1035	121	532	540	2159	
01:00	56		299		49		272		105		571		
01:15	74		290		40		258		114		548		
01:30	66		287		44		246		110		533		
01:45	60	256	321	1197	53	186	262	1038	113	442	583	2235	
02:00	57		350		58		255		115		605		
02:15	56		333		38		264		94		597		
02:30	43		297		41		282		84		579		
02:45	49	205	301	1281	45	182	264	1065	94	387	565	2346	
03:00	42		277		15		268		57		545		
03:15	29		311		35		240		64		551		
03:30	28		303		21		228		49		531		
03:45	17	116	304	1195	19	90	243	979	36	206	547	2174	
04:00	13		273		17		216		30		489		
04:15	18		292		18		227		36		519		
04:30	8		292		14		219		22		511		
04:45	20	59	284	1141	24	73	218	880	44	132	502	2021	
05:00	12		316		22		183		34		499		
05:15	18		288		26		185		44		473		
05:30	16		315		41		183		57		498		
05:45	25	71	258	1177	33	122	162	713	58	193	420	1890	
06:00	25		254		30		181		55		435		
06:15	31		279		56		181		87		460		
06:30	40		268		59		174		99		442		
06:45	49	145	241	1042	61	206	149	685	110	351	390	1727	
07:00	43		225		61		176		104		401		
07:15	66		243		74		163		140		406		
07:30	64		208		91		153		155		361		
07:45	62	235	224	900	96	322	162	654	158	557	386	1554	
08:00	104		211		95		155		199		366		
08:15	110		203		115		131		225		334		
08:30	96		191		121		109		217		300		
08:45	137	447	175	780	130	461	115	510	267	908	290	1290	
09:00	114		189		143		116		257		305		
09:15	155		170		186		93		341		263		
09:30	138		156		184		99		322		255		
09:45	196	603	103	618	158	671	95	403	354	1274	198	1021	
10:00	174		126		202		82		376		208		
10:15	166		127		202		63		368		190		
10:30	194		103		206		83		400		186		
10:45	207	741	80	436	208	818	64	292	415	1559	144	728	
11:00	235		88		225		59		460		147		
11:15	238		67		248		37		486		104		
11:30	240		66		210		44		450		110		
11:45	300	1013	61	282	248	931	32	172	548	1944	93	454	
Total	4217		11173		4268		8426		8485		19599		
Percent	49.7%		57.0%		50.3%		43.0%						
Day Total		15390			12694				28084				
Peak	11:00	-	01:45	-	11:00	-	02:15	-	11:00	-	01:45	-	
Vol.	1013	-	1301	-	931	-	1078	-	1944	-	2364	-	
P.H.F.	0.844		0.929		0.939		0.956		0.887		0.977		



Winthrop Avenue (Route 145)  
east of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 H Volume  
Site Code: 13796.00

Start	EB		WB		Combin ed		5/8/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Mon	
12:00	59	236	31	184	90	420		
12:15	50	240	28	195	78	435		
12:30	41	257	24	193	65	450		
12:45	37	205	15	198	52	403	1708	
01:00	21	220	27	202	48	422		
01:15	23	244	11	188	34	432		
01:30	27	286	17	197	44	483		
01:45	22	246	22	213	44	459	1796	
02:00	25	256	25	215	50	471		
02:15	21	257	19	220	40	477		
02:30	14	303	24	232	38	535		
02:45	8	329	8	229	16	558	2041	
03:00	11	322	16	262	27	584		
03:15	14	315	12	277	26	592		
03:30	19	350	24	262	43	612		
03:45	6	349	21	246	27	595	2383	
04:00	13	375	22	237	35	612		
04:15	15	401	26	242	41	643		
04:30	15	360	40	256	55	616		
04:45	18	361	41	223	59	584	2455	
05:00	20	428	68	252	88	680		
05:15	32	402	76	262	108	664		
05:30	42	442	102	299	144	741		
05:45	67	382	122	252	189	634	2719	
06:00	77	374	152	229	229	603		
06:15	119	338	194	228	313	566		
06:30	171	315	267	187	438	502		
06:45	161	327	245	207	406	534	2205	
07:00	191	296	297	170	488	466		
07:15	229	283	294	190	523	473		
07:30	232	266	314	162	546	428		
07:45	242	226	324	139	566	365	1732	
08:00	229	214	313	135	542	349		
08:15	242	209	351	147	593	356		
08:30	191	171	263	128	454	299		
08:45	177	166	208	102	385	268	1272	
09:00	159	171	196	100	355	271		
09:15	170	192	196	96	366	288		
09:30	181	133	221	90	402	223		
09:45	136	131	219	832	355	223	1005	
10:00	174	113	185	75	359	188		
10:15	163	116	187	68	350	184		
10:30	190	107	205	51	395	158		
10:45	189	85	201	778	59	144	674	
11:00	205	79	208	41	413	120		
11:15	191	68	182	49	373	117		
11:30	218	65	187	31	405	96		
11:45	264	61	194	771	21	82	415	
Total	5121	12072	6424	8333	11545	20405		
Percent	44.4%	59.2%	55.6%	40.8%				
Day Total		17193		14757		31950		
Peak	07:30	-	05:00	-	07:30	-	05:00	-
Vol.	945	-	1654	-	1065	-	2719	-
P.H.F.	0.976	-	0.936	-	0.890	-	0.917	-

Winthrop Avenue (Route 145)  
east of Tomasello Drive  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 H Volume  
Site Code: 13796.00

Start	EB		WB		Combin ed		5/9/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Tue	
12:00	59	218	27	226	86	444		
12:15	46	215	27	179	73	394		
12:30	34	204	22	210	56	414		
12:45	30	241	26	173	56	414	1666	
01:00	25	230	16	203	41	433		
01:15	22	218	22	198	44	416		
01:30	26	233	9	209	35	442		
01:45	19	298	15	191	34	489	1780	
02:00	19	271	17	213	36	484		
02:15	11	242	6	241	17	483		
02:30	13	292	14	232	27	524		
02:45	12	282	8	200	20	482	1973	
03:00	8	311	13	247	21	558		
03:15	7	331	16	262	23	593		
03:30	12	331	13	273	25	604		
03:45	17	362	17	220	34	582	2337	
04:00	7	387	25	258	32	645		
04:15	15	366	29	256	44	622		
04:30	15	355	41	226	56	581		
04:45	16	416	36	222	52	638	2486	
05:00	36	443	66	274	102	717		
05:15	29	421	74	253	103	674		
05:30	43	370	109	280	152	650		
05:45	64	349	112	248	176	597	2638	
06:00	92	363	158	217	250	580		
06:15	156	307	200	203	356	510		
06:30	176	323	281	202	457	525		
06:45	197	290	254	185	451	475	2090	
07:00	198	315	294	189	492	504		
07:15	267	297	310	182	577	479		
07:30	225	244	304	163	529	407		
07:45	216	190	372	120	588	310	1700	
08:00	220	223	348	118	568	341		
08:15	219	177	316	119	535	296		
08:30	242	186	260	118	502	304		
08:45	230	200	236	86	466	286	1227	
09:00	184	178	193	132	377	310		
09:15	203	157	187	107	390	264		
09:30	205	171	211	94	416	265		
09:45	169	137	190	77	359	214	1053	
10:00	185	130	195	59	380	189		
10:15	182	121	173	81	355	202		
10:30	208	112	192	59	400	171		
10:45	202	103	177	49	379	152	714	
11:00	180	89	183	62	363	151		
11:15	192	85	214	46	406	131		
11:30	201	73	174	40	375	113		
11:45	232	72	191	41	423	113	508	
Total	5366	11929	6373	8243	11739	20172		
Percent	45.7%	59.1%	54.3%	40.9%				
Day Total		17295		14616		31911		
Peak	07:15	-	04:45	-	07:30	-	07:15	-
Vol.	928	-	1650	-	1340	-	2262	-
P.H.F.	0.869	-	0.931	-	0.901	-	0.962	-



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175607 | Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/1														
7	49	2	0	0	0	0	0	0	0	0	0	0	0	51
01:00	31	0	0	0	0	0	0	0	0	0	0	0	0	31
02:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
03:00	23	1	0	0	0	0	0	0	0	0	0	0	0	24
04:00	37	0	0	0	0	0	0	0	0	0	0	0	0	37
05:00	166	1	0	0	0	0	0	0	0	0	0	0	0	167
06:00	735	12	0	0	0	0	0	0	0	0	0	0	0	747
07:00	1127	20	2	0	0	0	0	0	0	0	0	0	0	1149
08:00	953	15	0	0	0	0	0	0	0	0	0	0	0	968
09:00	503	5	0	0	0	0	0	0	0	0	0	0	0	508
10:00	339	7	0	0	0	0	0	0	0	0	0	0	0	346
11:00	363	5	1	0	0	0	0	0	0	0	0	0	0	369
12 PM	459	8	0	0	0	0	0	0	0	0	0	0	0	467
13:00	401	6	1	0	0	0	0	0	0	0	0	0	0	408
14:00	390	10	0	0	0	0	0	0	0	0	0	0	0	400
15:00	450	8	1	0	0	0	0	0	0	0	0	0	0	459
16:00	397	5	1	0	0	0	0	0	0	0	0	0	0	403
17:00	439	5	0	0	0	0	0	0	0	0	0	0	0	444
18:00	388	3	0	0	0	0	0	0	0	0	0	0	0	391
19:00	333	3	0	0	0	0	0	0	0	0	0	0	0	336
20:00	263	0	0	0	0	0	0	0	0	0	0	0	0	263
21:00	216	2	0	0	0	0	0	0	0	0	0	0	0	218
22:00	168	0	0	0	0	0	0	0	0	0	0	0	0	168
23:00	96	0	0	0	0	0	0	0	0	0	0	0	0	96
Total	8347	118	6	0	0	0	0	0	0	0	0	0	0	8471
Percent	98.5%	1.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00											07:00
Vol.	1127	20	2											1149
PM Peak	12:00	14:00	13:00											12:00
Vol.	459	10	1											467



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/1														
7	58	2	0	0	0	0	0	0	0	0	0	0	0	60
01:00	37	0	0	0	0	0	0	0	0	0	0	0	0	37
02:00	22	1	0	0	0	0	0	0	0	0	0	0	0	23
03:00	22	1	1	0	0	0	0	0	0	0	0	0	0	24
04:00	43	4	0	0	0	0	0	0	0	0	0	0	0	47
05:00	186	6	0	0	0	0	0	0	0	0	0	0	0	192
06:00	860	13	0	0	0	0	0	0	0	0	0	0	0	873
07:00	1151	23	3	0	0	0	0	0	0	0	0	0	0	1177
08:00	927	11	0	0	0	0	0	0	0	0	0	0	0	938
09:00	461	14	0	0	0	0	0	0	0	0	0	0	0	475
10:00	363	10	0	0	0	0	0	0	0	0	0	0	0	373
11:00	336	11	0	0	0	0	0	0	0	0	0	0	0	347
12 PM	338	6	1	0	0	0	0	0	0	0	0	0	0	345
13:00	372	8	0	0	0	0	0	0	0	0	0	0	0	380
14:00	491	15	0	0	0	0	0	0	0	0	0	0	0	506
15:00	432	6	0	0	0	0	0	0	0	0	0	0	0	438
16:00	466	6	1	0	0	0	0	0	0	0	0	0	0	473
17:00	464	3	0	0	0	0	0	0	0	0	0	0	0	467
18:00	416	2	0	0	0	0	0	0	0	0	0	0	0	418
19:00	368	1	0	0	0	0	0	0	0	0	0	0	0	369
20:00	257	1	0	0	0	0	0	0	0	0	0	0	0	258
21:00	211	1	0	0	0	0	0	0	0	0	0	0	0	212
22:00	151	0	0	0	0	0	0	0	0	0	0	0	0	151
23:00	101	0	0	0	0	0	0	0	0	0	0	0	0	101
Total	8533	145	6	0	0	0	0	0	0	0	0	0	0	8684
Percent	98.3%	1.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00											07:00
Vol.	1151	23	3											1177
PM Peak	14:00	14:00	12:00											14:00
Vol.	491	15	1											506



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Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/1														
7	53	0	0	0	0	0	0	0	0	0	0	0	0	53
01:00	47	1	0	0	0	0	0	0	0	0	0	0	0	48
02:00	30	1	0	0	0	0	0	0	0	0	0	0	0	31
03:00	22	0	0	0	0	0	0	0	0	0	0	0	0	22
04:00	54	1	0	0	0	0	0	0	0	0	0	0	0	55
05:00	203	5	0	0	0	0	0	0	0	0	0	0	0	208
06:00	810	12	1	0	0	0	0	0	0	0	0	0	0	823
07:00	977	22	0	0	0	0	0	0	0	0	0	0	0	999
08:00	751	13	0	0	0	0	0	0	0	0	0	0	0	764
09:00	425	8	0	0	0	0	0	0	0	0	0	0	0	433
10:00	346	6	0	0	0	0	0	0	0	0	0	0	0	352
11:00	386	7	1	0	0	0	0	0	0	0	0	0	0	394
12 PM	357	8	0	0	0	0	0	0	0	0	0	0	0	365
13:00	446	10	0	0	0	0	0	0	0	0	0	0	0	456
14:00	555	10	1	0	0	0	0	0	0	0	0	0	0	566
15:00	418	6	0	0	0	0	0	0	0	0	0	0	0	424
16:00	450	2	0	0	0	0	0	0	0	0	0	0	0	452
17:00	411	1	0	0	0	0	0	0	0	0	0	0	0	412
18:00	379	0	0	0	0	0	0	0	0	0	0	0	0	379
19:00	317	0	0	0	0	0	0	0	0	0	0	0	0	317
20:00	231	0	0	0	0	0	0	0	0	0	0	0	0	231
21:00	206	0	0	0	0	0	0	0	0	0	0	0	0	206
22:00	155	1	0	0	0	0	0	0	0	0	0	0	0	156
23:00	119	0	0	0	0	0	0	0	0	0	0	0	0	119
Total	8148	114	3	0	0	0	0	0	0	0	0	0	0	8265
Percent	98.6%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	06:00											07:00
Vol.	977	22	1											999
PM Peak	14:00	13:00	14:00											14:00
Vol.	555	10	1											566



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/1														
7	89	0	0	0	0	0	0	0	0	0	0	0	0	89
01:00	65	0	0	0	0	0	0	0	0	0	0	0	0	65
02:00	44	2	0	0	0	0	0	0	0	0	0	0	0	46
03:00	37	2	0	0	0	0	0	0	0	0	0	0	0	39
04:00	34	1	0	0	0	0	0	0	0	0	0	0	0	35
05:00	78	1	0	0	0	0	0	0	0	0	0	0	0	79
06:00	150	5	0	0	0	0	0	0	0	0	0	0	0	155
07:00	203	5	0	0	0	0	0	0	0	0	0	0	0	208
08:00	245	2	0	0	0	0	0	0	0	0	0	0	0	247
09:00	285	3	0	0	0	0	0	0	0	0	0	0	0	288
10:00	398	4	0	0	0	0	0	0	0	0	0	0	0	402
11:00	420	2	0	0	0	0	0	0	0	0	0	0	0	422
12 PM	404	1	0	0	0	0	0	0	0	0	0	0	0	405
13:00	500	1	0	0	0	0	0	0	0	0	0	0	0	501
14:00	479	1	0	0	0	0	0	0	0	0	0	0	0	480
15:00	445	2	0	0	0	0	0	0	0	0	0	0	0	447
16:00	55	1	0	0	0	0	0	0	0	0	0	0	0	56
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3931	33	0	0	0	0	0	0	0	0	0	0	0	3964
Percent	99.2%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	06:00												11:00
Vol.	420	5												422
PM Peak	13:00	15:00												13:00
Vol.	500	2												501



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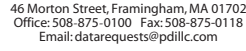
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[illegible]



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	48	0	0	0	0	0	0	0	0	0	0	0	0	48
01:00	42	0	0	0	0	0	0	0	0	0	0	0	0	42
02:00	25	0	0	0	0	0	0	0	0	0	0	0	0	25
03:00	20	0	0	0	0	0	0	0	0	0	0	0	0	20
04:00	44	2	0	0	0	0	0	0	0	0	0	0	0	46
05:00	231	4	1	0	0	0	0	0	0	0	0	0	0	236
06:00	928	21	0	0	0	0	0	0	0	0	0	0	0	949
07:00	1111	22	0	0	0	0	0	0	0	0	0	0	0	1133
08:00	737	11	0	0	0	0	0	0	0	0	0	0	0	748
09:00	364	6	0	0	0	0	0	0	0	0	0	0	0	370
10:00	333	4	0	0	0	0	0	0	0	0	0	0	0	337
11:00	366	10	1	0	0	0	0	0	0	0	0	0	0	377
12 PM	339	10	0	0	0	0	0	0	0	0	0	0	0	349
13:00	407	4	0	0	0	0	0	0	0	0	0	0	0	411
14:00	464	14	0	0	0	0	0	0	0	0	0	0	0	478
15:00	430	9	0	0	0	0	0	0	0	0	0	0	0	439
16:00	442	4	0	0	0	0	0	0	0	0	0	0	0	446
17:00	412	2	0	0	0	0	0	0	0	0	0	0	0	414
18:00	351	1	0	0	0	0	0	0	0	0	0	0	0	352
19:00	350	2	0	0	0	0	0	0	0	0	0	0	0	352
20:00	237	0	0	0	0	0	0	0	0	0	0	0	0	237
21:00	157	0	0	0	0	0	0	0	0	0	0	0	0	157
22:00	145	0	0	0	0	0	0	0	0	0	0	0	0	145
23:00	78	0	0	0	0	0	0	0	0	0	0	0	0	78
Total	8061	126	2	0	0	0	0	0	0	0	0	0	0	8189
Percent	98.4%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	05:00											07:00
Vol.	1111	22	1											1133
PM Peak	14:00	14:00												14:00
Vol.	464	14												478





Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/17														
7:00	36	0	0	0	0	0	0	0	0	0	0	0	0	36
01:00	23	0	0	0	0	0	0	0	0	0	0	0	0	23
02:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
03:00	26	1	0	0	0	0	0	0	0	0	0	0	0	27
04:00	71	1	0	0	0	0	0	0	0	0	0	0	0	72
05:00	275	4	0	0	0	0	0	0	0	0	0	0	0	279
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	452	6	0	0	0	0	0	0	0	0	0	0	0	458
Percent	98.7%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	05:00												05:00
Vol.	275	4												279
PM Peak														
Vol.														



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	43	0	0	0	0	0	0	0	0	0	0	0	0	43
01:00	52	0	0	0	0	0	0	0	0	0	0	0	0	52
02:00	22	0	0	0	0	0	0	0	0	0	0	0	0	22
03:00	12	0	0	0	0	0	0	0	0	0	0	0	0	12
04:00	27	1	0	0	0	0	0	0	0	0	0	0	0	28
05:00	53	2	0	0	0	0	0	0	0	0	0	0	0	55
06:00	123	2	0	0	0	0	0	0	0	0	0	0	0	125
07:00	205	10	0	0	0	0	0	0	0	0	0	0	0	215
08:00	185	7	0	0	0	0	0	0	0	0	0	0	0	192
09:00	253	9	0	0	0	0	0	0	0	0	0	0	0	262
10:00	253	6	0	0	0	0	0	0	0	0	0	0	0	259
11:00	317	5	0	0	0	0	0	0	0	0	0	0	0	322
12 PM	383	14	1	0	0	0	0	0	0	0	0	0	0	398
13:00	306	3	0	0	0	0	0	0	0	0	0	0	0	309
14:00	390	9	0	0	0	0	0	0	0	0	0	0	0	399
15:00	528	4	0	0	0	0	0	0	0	0	0	0	0	532
16:00	566	10	0	0	0	0	0	0	0	0	0	0	0	576
17:00	608	2	0	0	0	0	0	0	0	0	0	0	0	610
18:00	488	2	0	0	0	0	0	0	0	0	0	0	0	490
19:00	374	2	0	0	0	0	0	0	0	0	0	0	0	376
20:00	233	1	0	0	0	0	0	0	0	0	0	0	0	234
21:00	182	2	0	0	0	0	0	0	0	0	0	0	0	184
22:00	142	0	0	0	0	0	0	0	0	0	0	0	0	142
23:00	102	0	0	0	0	0	0	0	0	0	0	0	0	102
Total	5847	91	1	0	0	0	0	0	0	0	0	0	0	5939
Percent	98.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	07:00												11:00
Vol.	317	10												322
PM Peak	17:00	12:00	12:00											17:00
Vol.	608	14	1											610



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/17														
7:00	74	0	0	0	0	0	0	0	0	0	0	0	0	74
01:00	42	0	0	0	0	0	0	0	0	0	0	0	0	42
02:00	24	0	0	0	0	0	0	0	0	0	0	0	0	24
03:00	12	0	1	0	0	0	0	0	0	0	0	0	0	13
04:00	16	0	0	0	0	0	0	0	0	0	0	0	0	16
05:00	57	2	0	0	0	0	0	0	0	0	0	0	0	59
06:00	129	4	1	0	0	0	0	0	0	0	0	0	0	134
07:00	191	9	0	0	0	0	0	0	0	0	0	0	0	200
08:00	190	9	1	0	0	0	0	0	0	0	0	0	0	200
09:00	225	7	0	0	0	0	0	0	0	0	0	0	0	232
10:00	254	14	0	0	0	0	0	0	0	0	0	0	0	268
11:00	253	7	0	0	0	0	0	0	0	0	0	0	0	260
12 PM	292	10	0	0	0	0	0	0	0	0	0	0	0	302
13:00	293	6	0	0	0	0	0	0	0	0	0	0	0	299
14:00	393	10	0	0	0	0	0	0	0	0	0	0	0	403
15:00	526	10	0	0	0	0	0	0	0	0	0	0	0	536
16:00	577	8	0	0	0	0	0	0	0	0	0	0	0	585
17:00	586	5	0	0	0	0	0	0	0	0	0	0	0	591
18:00	534	2	0	0	0	0	0	0	0	0	0	0	0	536
19:00	320	4	0	0	0	0	0	0	0	0	0	0	0	324
20:00	217	0	0	0	0	0	0	0	0	0	0	0	0	217
21:00	185	1	0	0	0	0	0	0	0	0	0	0	0	186
22:00	151	0	0	0	0	0	0	0	0	0	0	0	0	151
23:00	112	0	1	0	0	0	0	0	0	0	0	0	0	113
Total	5653	108	4	0	0	0	0	0	0	0	0	0	0	5765
Percent	98.1%	1.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	10:00	03:00											10:00
Vol.	254	14	1											268
PM Peak	17:00	12:00	23:00											17:00
Vol.	586	10	1											591



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/1														
7	56	0	0	0	0	0	0	0	0	0	0	0	0	56
01:00	42	1	0	0	0	0	0	0	0	0	0	0	0	43
02:00	41	0	0	0	0	0	0	0	0	0	0	0	0	41
03:00	20	0	0	0	0	0	0	0	0	0	0	0	0	20
04:00	26	0	0	0	0	0	0	0	0	0	0	0	0	26
05:00	68	0	0	0	0	0	0	0	0	0	0	0	0	68
06:00	135	6	0	0	0	0	0	0	0	0	0	0	0	141
07:00	209	10	0	0	0	0	0	0	0	0	0	0	0	219
08:00	186	5	1	0	0	0	0	0	0	0	0	0	0	192
09:00	231	4	0	0	0	0	0	0	0	0	0	0	0	235
10:00	278	12	0	0	0	0	0	0	0	0	0	0	0	290
11:00	302	10	0	0	0	0	0	0	0	0	0	0	0	312
12 PM	334	8	2	0	0	0	0	0	0	0	0	0	0	344
13:00	314	6	0	0	0	0	0	0	0	0	0	0	0	320
14:00	402	7	0	0	0	0	0	0	0	0	0	0	0	409
15:00	509	7	0	0	0	0	0	0	0	0	0	0	0	516
16:00	544	2	0	0	0	0	0	0	0	0	0	0	0	546
17:00	559	4	0	0	0	0	0	0	0	0	0	0	0	563
18:00	419	1	0	0	0	0	0	0	0	0	0	0	0	420
19:00	281	0	0	0	0	0	0	0	0	0	0	0	0	281
20:00	207	1	0	0	0	0	0	0	0	0	0	0	0	208
21:00	218	0	0	0	0	0	0	0	0	0	0	0	0	218
22:00	153	1	0	0	0	0	0	0	0	0	0	0	0	154
23:00	125	0	0	0	0	0	0	0	0	0	0	0	0	125
Total	5659	85	3	0	0	0	0	0	0	0	0	0	0	5747
Percent	98.5%	1.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	08:00											11:00
Vol.	302	12	1											312
PM Peak	17:00	12:00	12:00											17:00
Vol.	559	8	2											563



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	101	1	0	0	0	0	0	0	0	0	0	0	0	102
01:00	59	0	0	0	0	0	0	0	0	0	0	0	0	59
02:00	59	0	0	0	0	0	0	0	0	0	0	0	0	59
03:00	26	0	0	0	0	0	0	0	0	0	0	0	0	26
04:00	25	0	0	0	0	0	0	0	0	0	0	0	0	25
05:00	46	1	0	0	0	0	0	0	0	0	0	0	0	47
06:00	75	1	1	0	0	0	0	0	0	0	0	0	0	77
07:00	134	3	0	0	0	0	0	0	0	0	0	0	0	137
08:00	177	3	0	0	0	0	0	0	0	0	0	0	0	180
09:00	244	3	0	0	0	0	0	0	0	0	0	0	0	247
10:00	285	6	0	0	0	0	0	0	0	0	0	0	0	291
11:00	331	5	0	0	0	0	0	0	0	0	0	0	0	336
12 PM	344	7	0	0	0	0	0	0	0	0	0	0	0	351
13:00	325	1	0	0	0	0	0	0	0	0	0	0	0	326
14:00	342	2	0	0	0	0	0	0	0	0	0	0	0	344
15:00	340	2	0	0	0	0	0	0	0	0	0	0	0	342
16:00	62	0	0	0	0	0	0	0	0	0	0	0	0	62
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2975	35	1	0	0	0	0	0	0	0	0	0	0	3011
Percent	98.8%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	06:00											11:00
Vol.	331	6	1											336
PM Peak	12:00	12:00												12:00
Vol.	344	7												351



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Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/17														
7:00	130	1	0	0	0	0	0	0	0	0	0	0	0	131
01:00	101	0	0	0	0	0	0	0	0	0	0	0	0	101
02:00	71	0	0	0	0	0	0	0	0	0	0	0	0	71
03:00	50	0	0	0	0	0	0	0	0	0	0	0	0	50
04:00	17	0	0	0	0	0	0	0	0	0	0	0	0	17
05:00	42	0	0	0	0	0	0	0	0	0	0	0	0	42
06:00	55	0	0	0	0	0	0	0	0	0	0	0	0	55
07:00	86	0	0	0	0	0	0	0	0	0	0	0	0	86
08:00	138	0	0	0	0	0	0	0	0	0	0	0	0	138
09:00	226	1	0	0	0	0	0	0	0	0	0	0	0	227
10:00	259	3	1	0	0	0	0	0	0	0	0	0	0	263
11:00	300	2	0	0	0	0	0	0	0	0	0	0	0	302
12 PM	339	0	0	0	0	0	0	0	0	0	0	0	0	339
13:00	343	1	0	0	0	0	0	0	0	0	0	0	0	344
14:00	373	2	0	0	0	0	0	0	0	0	0	0	0	375
15:00	355	0	0	0	0	0	0	0	0	0	0	0	0	355
16:00	305	0	0	0	0	0	0	0	0	0	0	0	0	305
17:00	329	0	0	0	0	0	0	0	0	0	0	0	0	329
18:00	313	2	0	0	0	0	0	0	0	0	0	0	0	315
19:00	290	1	0	0	0	0	0	0	0	0	0	0	0	291
20:00	203	0	0	0	0	0	0	0	0	0	0	0	0	203
21:00	165	0	0	0	0	0	0	0	0	0	0	0	0	165
22:00	125	1	0	0	0	0	0	0	0	0	0	0	0	126
23:00	82	0	0	0	0	0	0	0	0	0	0	0	0	82
Total	4697	14	1	0	0	0	0	0	0	0	0	0	0	4712
Percent	99.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	10:00											11:00
Vol.	300	3	1											302
PM Peak	14:00	14:00												14:00
Vol.	373	2												375



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/1														
7	48	0	0	0	0	0	0	0	0	0	0	0	0	48
01:00	29	0	0	0	0	0	0	0	0	0	0	0	0	29
02:00	23	0	0	0	0	0	0	0	0	0	0	0	0	23
03:00	15	0	0	0	0	0	0	0	0	0	0	0	0	15
04:00	31	1	0	0	0	0	0	0	0	0	0	0	0	32
05:00	76	2	0	0	0	0	0	0	0	0	0	0	0	78
06:00	146	8	0	0	0	0	0	0	0	0	0	0	0	154
07:00	190	11	0	0	0	0	0	0	0	0	0	0	0	201
08:00	208	5	0	0	0	0	0	0	0	0	0	0	0	213
09:00	255	8	0	0	0	0	0	0	0	0	0	0	0	263
10:00	262	1	1	0	0	0	0	0	0	0	0	0	0	264
11:00	283	8	0	0	0	0	0	0	0	0	0	0	0	291
12 PM	289	11	0	0	0	0	0	0	0	0	0	0	0	300
13:00	305	9	0	0	0	0	0	0	0	0	0	0	0	314
14:00	428	11	0	0	0	0	0	0	0	0	0	0	0	439
15:00	569	8	0	0	0	0	0	0	0	0	0	0	0	577
16:00	540	4	0	0	0	0	0	0	0	0	0	0	0	544
17:00	559	0	0	0	0	0	0	0	0	0	0	0	0	559
18:00	355	1	0	0	0	0	0	0	0	0	0	0	0	356
19:00	298	5	0	0	0	0	0	0	0	0	0	0	0	303
20:00	198	2	0	0	0	0	0	0	0	0	0	0	0	200
21:00	161	0	0	0	0	0	0	0	0	0	0	0	0	161
22:00	104	1	0	0	0	0	0	0	0	0	0	0	0	105
23:00	71	1	0	0	0	0	0	0	0	0	0	0	0	72
Total	5443	97	1	0	0	0	0	0	0	0	0	0	0	5541
Percent	98.2%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	07:00	10:00											11:00
Vol.	283	11	1											291
PM Peak	15:00	12:00												15:00
Vol.	569	11												577



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175607 | Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/1														
7	45	0	0	0	0	0	0	0	0	0	0	0	0	45
01:00	34	0	0	0	0	0	0	0	0	0	0	0	0	34
02:00	13	0	0	0	0	0	0	0	0	0	0	0	0	13
03:00	17	1	0	0	0	0	0	0	0	0	0	0	0	18
04:00	34	0	0	0	0	0	0	0	0	0	0	0	0	34
05:00	82	3	0	0	0	0	0	0	0	0	0	0	0	85
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	225	4	0	0	0	0	0	0	0	0	0	0	0	229
Percent	98.3%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	05:00												05:00
Vol.	82	3												85
PM Peak														
Vol.														





PRECISION  
D A T A  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Bennington Street  
south of Crescent Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 I Volume  
Site Code: 13796.00

Start Time	5/3/2017		5/4/2017		5/5/2017		5/6/2017		5/7/2017		5/8/2017		5/9/2017		Week Average	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	51	43	60	74	53	56	89	102	116	131	48	48	36	45	65	71
01:00	31	52	37	42	48	43	65	59	92	101	42	29	23	34	48	51
02:00	21	22	23	24	31	41	46	59	84	71	25	23	21	13	36	36
03:00	24	12	24	13	22	20	39	26	44	50	20	15	27	18	29	22
04:00	37	28	47	16	55	26	35	25	25	17	46	32	72	34	45	25
05:00	167	55	192	59	208	68	79	47	64	42	236	78	279	85	175	62
06:00	747	125	873	134	823	141	155	77	84	55	949	154	0	0	519	98
07:00	1149	215	1177	200	999	219	208	137	144	86	1133	201	0	0	687	151
08:00	968	192	938	200	764	192	247	180	232	138	748	213	0	0	557	159
09:00	508	262	475	232	433	235	288	247	303	227	370	263	0	0	340	209
10:00	346	259	373	268	352	290	402	291	307	263	337	264	0	0	302	234
11:00	369	322	347	260	394	312	422	336	412	302	377	291	0	0	332	260
12:00 PM	467	398	345	302	365	344	405	351	504	339	349	300	0	0	348	291
01:00	408	309	380	299	456	320	501	326	482	344	411	314	0	0	377	273
02:00	400	399	506	403	566	409	480	344	483	375	478	439	0	0	416	338
03:00	459	532	438	536	424	516	447	342	432	355	439	577	0	0	377	408
04:00	403	576	473	585	452	546	56	62	404	305	446	544	0	0	319	374
05:00	444	610	467	591	412	563	0	0	436	329	414	559	0	0	310	379
06:00	391	490	418	536	379	420	0	0	347	315	352	356	0	0	270	302
07:00	336	376	369	324	317	281	0	0	341	291	352	303	0	0	245	225
08:00	263	234	258	217	231	208	0	0	267	203	237	200	0	0	179	152
09:00	218	184	212	186	206	218	0	0	210	165	157	161	0	0	143	131
10:00	168	142	151	151	156	154	0	0	136	126	145	105	0	0	108	97
11:00	96	102	101	113	119	125	0	0	75	82	78	72	0	0	67	71
Total Day	8471	5939	8684	5765	8265	5747	3964	3011	6024	4712	8189	5541	458	229	6294	4419
	14410		14449		14012		6975		10736		13730		687		10713	
AM Peak	07:00	11:00	07:00	10:00	07:00	11:00	11:00	11:00	11:00	11:00	07:00	11:00	05:00	05:00	07:00	11:00
Vol.	1149	322	1177	268	999	312	422	336	412	302	1133	291	279	85	687	260
PM Peak	12:00	17:00	14:00	17:00	14:00	17:00	13:00	12:00	12:00	14:00	14:00	15:00	-	-	14:00	15:00
Vol.	467	610	506	591	566	563	501	351	504	375	478	577	-	-	416	408

Comb. Total	14410	14449	14012	6975	10736	13730	687	10713
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ADT	ADT 10,714	AADT 10,714
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Bennington Street  
south of Crescent Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 I Volume  
Site Code: 13796.00

Start	SB		NB		Combin ed		5/3/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Wed	
12:00	15	113	11	86	26	199		
12:15	23	124	15	99	38	223		
12:30	7	106	10	117	17	223		
12:45	6	124	7	96	13	220	865	
01:00	7	92	16	78	23	170		
01:15	7	120	12	62	19	182		
01:30	10	86	14	85	24	171		
01:45	7	110	10	84	17	194	717	
02:00	4	98	7	95	11	193		
02:15	3	87	4	91	7	178		
02:30	6	110	4	99	10	209		
02:45	8	105	7	114	15	219	799	
03:00	6	115	4	114	10	229		
03:15	7	130	3	148	10	278		
03:30	7	101	2	141	9	242		
03:45	4	113	3	129	7	242	991	
04:00	7	83	4	160	11	243		
04:15	6	98	6	129	12	227		
04:30	12	100	12	136	24	236		
04:45	12	122	6	151	18	273	979	
05:00	27	136	7	164	34	300		
05:15	33	115	17	147	50	262		
05:30	46	98	18	148	64	246		
05:45	61	95	13	151	74	246	1054	
06:00	110	107	30	133	140	240		
06:15	160	97	24	102	184	199		
06:30	227	94	23	146	250	240		
06:45	250	93	48	109	298	202	881	
07:00	316	100	55	104	371	204		
07:15	292	73	57	104	349	177		
07:30	284	79	48	94	332	173		
07:45	257	84	55	74	312	158	712	
08:00	277	64	44	69	321	133		
08:15	280	67	47	60	327	127		
08:30	227	58	50	50	277	108		
08:45	184	74	51	55	235	129	497	
09:00	165	60	56	52	221	112		
09:15	128	56	71	47	199	103		
09:30	124	55	59	36	183	91		
09:45	91	47	76	49	167	96	402	
10:00	97	44	66	35	163	79		
10:15	90	44	61	42	151	86		
10:30	84	42	70	36	154	78		
10:45	75	38	62	29	137	67	310	
11:00	87	30	61	24	148	54		
11:15	79	30	82	38	161	68		
11:30	94	15	89	21	183	36		
11:45	109	21	90	19	199	40	198	
Total	4418	4053	1587	4352	6005	8405		
Percent	73.6%	48.2%	26.4%	51.8%				
Day Total	8471		5939		14410			
Peak	07:00	-	04:30	-	11:00	-	04:45	-
Vol.	1149	-	473	-	322	-	610	-
P.H.F.	0.909	-	0.869	-	0.894	-	0.930	-

Bennington Street  
south of Crescent Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 I Volume  
Site Code: 13796.00

Start	SB		NB		Combin ed		5/4/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Thu	
12:00	22	72	20	71	42	143		
12:15	14	82	23	80	37	162		
12:30	12	103	14	74	26	177		
12:45	12	88	17	77	29	165	647	
01:00	7	94	13	83	20	177		
01:15	14	85	14	84	28	169		
01:30	7	102	4	64	11	166		
01:45	9	99	11	68	20	167	679	
02:00	7	106	10	93	17	199		
02:15	4	151	3	100	7	251		
02:30	5	130	5	95	10	225		
02:45	7	119	6	115	13	234	909	
03:00	11	108	2	108	13	216		
03:15	8	100	3	140	11	240		
03:30	3	120	5	137	8	257		
03:45	2	110	3	151	5	261	974	
04:00	9	110	3	136	12	246		
04:15	8	110	5	159	13	269		
04:30	10	121	6	156	16	277		
04:45	20	132	2	134	22	266	1058	
05:00	30	109	9	152	39	261		
05:15	49	111	19	138	68	249		
05:30	46	119	14	146	60	265		
05:45	67	128	17	155	84	283	1058	
06:00	131	101	21	130	152	231		
06:15	213	108	29	136	242	244		
06:30	278	91	35	157	313	248		
06:45	251	118	49	113	300	231	954	
07:00	344	106	51	94	395	200		
07:15	281	96	64	84	345	180		
07:30	279	91	43	79	322	170		
07:45	273	76	42	67	315	143	693	
08:00	309	81	50	64	359	145		
08:15	247	58	43	45	290	103		
08:30	200	55	53	56	253	111		
08:45	182	64	54	52	236	116	475	
09:00	131	60	61	50	192	110		
09:15	121	61	51	59	172	120		
09:30	114	46	62	36	176	82		
09:45	109	45	58	41	167	86	398	
10:00	83	40	70	44	153	84		
10:15	109	41	69	37	178	78		
10:30	93	41	67	48	160	89		
10:45	88	29	62	22	150	51	302	
11:00	86	27	54	31	140	58		
11:15	92	36	67	42	159	78		
11:30	69	20	70	18	139	38		
11:45	100	18	69	22	169	40	214	
Total	4566	4118	1522	4243	6088	8361		
Percent	75.0%	49.3%	25.0%	50.7%				
Day Total	8684		5765		14449			
Peak	07:00	-	02:15	-	10:00	-	03:45	-
Vol.	1177	-	508	-	268	-	602	-
P.H.F.	0.855	-	0.841	-	0.957	-	0.947	-

Bennington Street  
south of Crescent Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 I Volume  
Site Code: 13796.00

Start	SB		NB		Combin ed		5/5/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	14	82	15	74	29	156		
12:15	12	105	15	90	27	195		
12:30	12	76	15	92	27	168		
12:45	15	102	11	88	26	190	709	
01:00	8	110	17	69	25	179		
01:15	16	97	12	81	28	178		
01:30	15	118	8	80	23	198		
01:45	9	131	6	90	15	221	776	
02:00	10	133	15	97	25	230		
02:15	6	142	11	107	17	249		
02:30	5	139	7	100	12	239		
02:45	10	152	8	105	18	257	975	
03:00	7	135	3	142	10	277		
03:15	6	107	6	126	12	233		
03:30	7	84	4	115	11	199		
03:45	2	98	7	133	9	231	940	
04:00	13	125	5	123	18	248		
04:15	16	120	9	129	25	249		
04:30	12	108	3	147	15	255		
04:45	14	99	9	147	23	246	998	
05:00	28	93	9	133	37	226		
05:15	34	117	29	147	63	264		
05:30	57	86	9	152	66	238		
05:45	89	116	21	131	110	247	975	
06:00	140	105	25	136	165	241		
06:15	205	87	32	95	237	182		
06:30	215	95	32	96	247	191		
06:45	263	92	52	93	315	185	799	
07:00	240	80	62	81	302	161		
07:15	258	62	56	83	314	145		
07:30	259	85	58	50	317	135		
07:45	242	90	43	67	285	157	598	
08:00	235	57	39	54	274	111		
08:15	217	65	55	47	272	112		
08:30	188	56	59	56	247	112		
08:45	124	53	39	51	163	104	439	
09:00	142	46	46	52	188	98		
09:15	106	55	56	54	162	109		
09:30	103	51	64	63	167	114		
09:45	82	54	69	49	151	103	424	
10:00	90	44	80	47	170	91		
10:15	85	30	79	22	164	52		
10:30	89	52	66	48	155	100		
10:45	88	30	65	37	153	67	310	
11:00	93	40	65	34	158	74		
11:15	97	25	77	31	174	56		
11:30	94	28	75	31	169	59		
11:45	110	26	95	29	205	55	244	
Total	4182	4083	1643	4104	5825	8187		
Percent	71.8%	49.9%	28.2%	50.1%				
Day Total	8265		5747		14012			
Peak	06:45	-	02:15	-	11:00	-	04:45	-
Vol.	1020	-	568	-	312	-	579	-
P.H.F.	0.970	-	0.934	-	0.821	-	0.952	-

Bennington Street  
south of Crescent Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 I Volume  
Site Code: 13796.00

Start	SB		NB		Combin ed		5/6/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sat	
12:00	20	107	29	86	49	193		
12:15	22	106	23	88	45	194		
12:30	26	92	25	80	51	172		
12:45	21	89	100	405	25	102	97	351
01:00	18	114	15	83	33	197	191	756
01:15	12	141	22	74	34	215		
01:30	19	132	12	81	31	213		
01:45	16	65	114	501	10	59	88	326
02:00	11	124	15	99	26	124	202	827
02:15	14	116	15	88	29	204		
02:30	12	119	15	66	27	185		
02:45	9	46	121	480	14	59	91	344
03:00	11	102	4	79	15	181	105	824
03:15	7	128	8	94	15	222		
03:30	9	107	3	78	12	185		
03:45	12	39	110	447	11	26	91	342
04:00	7	56	7	62	14	118	65	789
04:15	7	0	2	0	9	0		
04:30	8	0	11	0	19	0		
04:45	13	35	0	56	5	25	0	62
05:00	11	0	10	0	21	0	60	118
05:15	13	0	10	0	23	0		
05:30	25	0	12	0	37	0		
05:45	30	79	0	0	15	47	0	0
06:00	39	0	13	0	52	0	126	0
06:15	38	0	15	0	53	0		
06:30	35	0	22	0	57	0		
06:45	43	155	0	0	27	77	0	0
07:00	58	0	26	0	84	0	232	0
07:15	53	0	26	0	79	0		
07:30	50	0	41	0	91	0		
07:45	47	208	0	0	44	137	0	0
08:00	53	0	47	0	100	0	345	0
08:15	66	0	39	0	105	0		
08:30	60	0	32	0	92	0		
08:45	68	247	0	0	62	180	0	0
09:00	73	0	66	0	139	0	427	0
09:15	68	0	63	0	131	0		
09:30	69	0	53	0	122	0		
09:45	78	288	0	0	65	247	0	0
10:00	80	0	70	0	150	0	535	0
10:15	110	0	84	0	194	0		
10:30	105	0	85	0	190	0		
10:45	107	402	0	0	52	291	0	0
11:00	110	0	81	0	191	0	693	0
11:15	111	0	82	0	193	0		
11:30	118	0	94	0	212	0		
11:45	83	422	0	0	79	336	0	0
Total	2075	1889	1586	1425	3661	3314		
Percent	56.7%	57.0%	43.3%	43.0%				
Day Total		3964		3011		6975		
Peak	10:45	-	01:15	-	11:00	-	01:15	-
Vol.	446	-	511	-	336	-	853	-
P.H.F.	0.945	-	0.906	-	0.894	-	0.956	-

Bennington Street  
south of Crescent Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 I Volume  
Site Code: 13796.00

Start	SB		NB		Combin ed		5/7/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sun	
12:00	30	130	38	96	68	226		
12:15	21	139	29	81	50	220		
12:30	31	124	30	81	61	205		
12:45	34	111	34	81	68	192	843	
01:00	26	128	22	90	48	218		
01:15	26	116	32	78	58	194		
01:30	17	106	25	87	42	193		
01:45	23	132	22	89	45	221	826	
02:00	26	126	27	99	53	225		
02:15	21	148	19	90	40	238		
02:30	21	107	9	98	30	205		
02:45	16	102	16	88	32	190	858	
03:00	12	80	19	90	31	170		
03:15	10	99	13	80	23	179		
03:30	14	127	12	86	26	213		
03:45	8	126	6	99	14	225	787	
04:00	4	108	3	78	7	186		
04:15	7	94	4	68	11	162		
04:30	7	88	5	88	12	176		
04:45	7	114	5	71	12	185	709	
05:00	10	102	11	68	21	170		
05:15	12	129	12	105	24	234		
05:30	14	103	10	73	24	176		
05:45	28	102	9	83	37	185	765	
06:00	16	71	16	81	32	152		
06:15	17	106	9	88	26	194		
06:30	28	83	15	58	43	141		
06:45	23	87	15	88	38	175	662	
07:00	28	98	25	78	53	176		
07:15	40	99	19	74	59	173		
07:30	45	83	19	66	64	149		
07:45	31	61	23	73	54	134	632	
08:00	36	79	26	38	62	117		
08:15	58	72	25	58	83	130		
08:30	63	54	40	54	103	108		
08:45	75	62	47	53	122	115	470	
09:00	54	69	46	44	100	113		
09:15	64	60	58	43	122	103		
09:30	85	46	49	43	134	89		
09:45	100	35	74	35	174	70	375	
10:00	82	44	59	33	141	77		
10:15	84	26	68	31	152	57		
10:30	79	24	74	28	153	52		
10:45	62	42	62	34	124	76	262	
11:00	91	28	74	26	165	54		
11:15	105	20	72	20	177	40		
11:30	110	13	77	15	187	28		
11:45	106	14	79	21	185	35	157	
Total	1907	4117	1483	3229	3390	7346		
Percent	56.3%	56.0%	43.7%	44.0%				
Day Total		6024		4712		10736		
Peak	11:00	-	01:45	-	11:00	-	01:45	-
Vol.	412	-	513	-	302	-	376	-
P.H.F.	0.936	-	0.867	-	0.956	-	0.949	-

Bennington Street  
south of Crescent Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 I Volume  
Site Code: 13796.00

Start	SB		NB		Combin ed		5/8/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Mon	
12:00	8	89	10	79	18	168		
12:15	14	86	12	81	26	167		
12:30	13	90	11	74	24	164		
12:45	13	84	15	66	28	150	649	
01:00	7	88	4	68	11	156		
01:15	13	118	9	82	22	200		
01:30	14	118	11	71	25	189		
01:45	8	87	5	93	13	180	725	
02:00	9	108	7	88	16	196		
02:15	4	127	7	96	11	223		
02:30	8	129	6	131	14	260		
02:45	4	114	3	124	7	238	917	
03:00	2	126	4	148	6	274		
03:15	6	96	3	139	9	235		
03:30	5	100	6	138	11	238		
03:45	7	117	2	152	9	269	1016	
04:00	10	120	4	124	14	244		
04:15	8	111	8	143	16	254		
04:30	9	108	6	137	15	245		
04:45	19	107	14	140	33	247	990	
05:00	33	109	18	135	51	244		
05:15	38	112	14	169	52	281		
05:30	69	105	17	115	86	220		
05:45	96	88	29	140	125	228	973	
06:00	177	94	28	106	205	200		
06:15	238	85	28	91	266	176		
06:30	220	85	42	83	262	168		
06:45	314	88	56	76	370	164	708	
07:00	302	94	54	69	356	163		
07:15	280	95	46	85	326	180		
07:30	289	91	62	81	351	172		
07:45	262	72	39	68	301	140	655	
08:00	245	58	63	55	308	113		
08:15	234	59	59	50	293	109		
08:30	139	51	48	47	187	98		
08:45	130	69	43	48	173	117	437	
09:00	98	52	59	47	157	99		
09:15	96	32	81	30	177	62		
09:30	89	39	58	45	147	84		
09:45	87	34	65	39	152	73	318	
10:00	79	40	56	30	135	70		
10:15	82	39	75	25	157	64		
10:30	85	36	73	27	158	63		
10:45	91	30	60	23	151	53	250	
11:00	84	24	83	30	167	54		
11:15	93	20	69	18	162	38		
11:30	106	18	74	16	180	34		
11:45	94	16	65	8	159	24	150	
Total	4331	3858	1611	3930	5942	7788		
Percent	72.9%	49.5%	27.1%	50.5%				
Day Total		8189		5541		13730		
Peak	06:45	-	02:15	-	10:15	-	06:45	-
Vol.	1185	-	496	-	291	-	581	-
P.H.F.	0.943	-	0.961	-	0.877	-	0.859	-

Bennington Street  
south of Crescent Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 I Volume  
Site Code: 13796.00

Start	SB				NB				Combined		5/9/2017		
Time	A.M.		P.M.		A.M.	P.M.			A.M.	P.M.	Tue		
12:00	11		0		12	0			23	0			
12:15	12		0		14	0			26	0			
12:30	5		0		9	0			14	0			
12:45	8	36	0	0	10	45	0	0	18	81	0	0	
01:00	7		0		12	0			19	0			
01:15	6		0		8	0			14	0			
01:30	6		0		6	0			12	0			
01:45	4	23	0	0	8	34	0	0	12	57	0	0	
02:00	6		0		4	0			10	0			
02:15	5		0		4	0			9	0			
02:30	2		0		2	0			4	0			
02:45	8	21	0	0	3	13	0	0	11	34	0	0	
03:00	6		0		2	0			8	0			
03:15	12		0		6	0			18	0			
03:30	3		0		4	0			7	0			
03:45	6	27	0	0	6	18	0	0	12	45	0	0	
04:00	13		0		8	0			21	0			
04:15	10		0		7	0			17	0			
04:30	14		0		6	0			20	0			
04:45	35	72	0	0	13	34	0	0	48	106	0	0	
05:00	34		0		22	0			56	0			
05:15	56		0		20	0			76	0			
05:30	62		0		19	0			81	0			
05:45	127	279	0	0	24	85	0	0	151	364	0	0	
06:00	0		0		0	0			0	0			
06:15	0		0		0	0			0	0			
06:30	0		0		0	0			0	0			
06:45	0	0	0	0	0	0	0	0	0	0	0	0	
07:00	0		0		0	0			0	0			
07:15	0		0		0	0			0	0			
07:30	0		0		0	0			0	0			
07:45	0	0	0	0	0	0	0	0	0	0	0	0	
08:00	0		0		0	0			0	0			
08:15	0		0		0	0			0	0			
08:30	0		0		0	0			0	0			
08:45	0	0	0	0	0	0	0	0	0	0	0	0	
09:00	0		0		0	0			0	0			
09:15	0		0		0	0			0	0			
09:30	0		0		0	0			0	0			
09:45	0	0	0	0	0	0	0	0	0	0	0	0	
10:00	0		0		0	0			0	0			
10:15	0		0		0	0			0	0			
10:30	0		0		0	0			0	0			
10:45	0	0	0	0	0	0	0	0	0	0	0	0	
11:00	0		0		0	0			0	0			
11:15	0		0		0	0			0	0			
11:30	0		0		0	0			0	0			
11:45	0	0	0	0	0	0	0	0	0	0	0	0	
Total	458		0		229	0			687	0			
Percent	66.7%		0.0%		33.3%	0.0%							
Day Total	458				229				687				
Peak	05:00	-	-	-	05:00	-	-	-	05:00	-	-	-	-
Vol.	279	-	-	-	85	-	-	-	364	-	-	-	-
P.H.F.	0.549				0.885				0.603				





Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
01:00	17	0	0	0	0	0	0	0	0	0	0	0	0	17
02:00	28	1	0	0	0	0	0	0	0	0	0	0	0	29
03:00	11	2	0	0	0	0	0	0	0	0	0	0	0	13
04:00	42	1	0	0	0	0	0	0	0	0	0	0	0	43
05:00	108	5	0	0	0	0	0	0	0	0	0	0	0	113
06:00	344	7	0	0	0	0	0	0	0	0	0	0	0	351
07:00	378	13	1	0	0	0	0	0	0	0	0	0	0	392
08:00	356	12	0	0	0	0	0	0	0	0	0	0	0	368
09:00	253	5	0	0	0	0	0	0	0	0	0	0	0	258
10:00	238	9	1	0	0	0	0	0	0	0	0	0	0	248
11:00	253	7	3	0	0	0	0	0	0	0	0	0	0	263
12 PM	450	13	0	0	0	0	0	0	0	0	0	0	0	463
13:00	290	12	0	0	0	0	0	0	0	0	0	0	0	302
14:00	278	10	0	0	0	0	0	0	0	0	0	0	0	288
15:00	254	10	0	0	0	0	0	0	0	0	0	0	0	264
16:00	285	10	0	0	0	0	0	0	0	0	0	0	0	295
17:00	303	18	0	0	0	0	0	0	0	0	0	0	0	321
18:00	313	1	0	0	0	0	0	0	0	0	0	0	0	314
19:00	267	3	1	0	0	0	0	0	0	0	0	0	0	271
20:00	179	2	0	0	0	0	0	0	0	0	0	0	0	181
21:00	118	1	0	0	0	0	0	0	0	0	0	0	0	119
22:00	98	0	1	0	0	0	0	0	0	0	0	0	0	99
23:00	52	0	0	0	0	0	0	0	0	0	0	0	0	52
Total	4936	142	7	0	0	0	0	0	0	0	0	0	0	5085
Percent	97.1%	2.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	11:00											07:00
Vol.	378	13	3											392
PM Peak	12:00	17:00	19:00											12:00
Vol.	450	18	1											463



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/1														
7	32	1	0	0	0	0	0	0	0	0	0	0	0	33
01:00	26	0	0	0	0	0	0	0	0	0	0	0	0	26
02:00	18	1	0	0	0	0	0	0	0	0	0	0	0	19
03:00	16	1	0	0	0	0	0	0	0	0	0	0	0	17
04:00	33	1	0	0	0	0	0	0	0	0	0	0	0	34
05:00	110	4	0	0	0	0	0	0	0	0	0	0	0	114
06:00	331	10	0	0	0	0	0	0	0	0	0	0	0	341
07:00	414	14	1	0	0	0	0	0	0	0	0	0	0	429
08:00	337	7	0	0	0	0	0	0	0	0	0	0	0	344
09:00	246	7	2	0	0	0	0	0	0	0	0	0	0	255
10:00	214	6	1	0	0	0	0	0	0	0	0	0	0	221
11:00	228	8	0	0	0	0	0	0	0	0	0	0	0	236
12 PM	264	7	0	0	0	0	0	0	0	0	0	0	0	271
13:00	269	8	0	0	0	0	0	0	0	0	0	0	0	277
14:00	317	10	1	0	0	0	0	0	0	0	0	0	0	328
15:00	327	5	0	0	0	0	0	0	0	0	0	0	0	332
16:00	391	19	0	0	0	0	0	0	0	0	0	0	0	410
17:00	383	13	0	0	0	0	0	0	0	0	0	0	0	396
18:00	309	9	0	0	0	0	0	0	0	0	0	0	0	318
19:00	231	1	0	0	0	0	0	0	0	0	0	0	0	232
20:00	205	1	0	0	0	0	0	0	0	0	0	0	0	206
21:00	141	1	0	0	0	0	0	0	0	0	0	0	0	142
22:00	112	0	0	0	0	0	0	0	0	0	0	0	0	112
23:00	55	1	0	0	0	0	0	0	0	0	0	0	0	56
Total	5009	135	5	0	0	0	0	0	0	0	0	0	0	5149
Percent	97.3%	2.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	09:00											07:00
Vol.	414	14	2											429
PM Peak	16:00	16:00	14:00											16:00
Vol.	391	19	1											410



Page 3

175607 J Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	28	0	0	0	0	0	0	0	0	0	0	0	0	28
01:00	45	0	0	0	0	0	0	0	0	0	0	0	0	45
02:00	22	1	0	0	0	0	0	0	0	0	0	0	0	23
03:00	13	0	0	0	0	0	0	0	0	0	0	0	0	13
04:00	36	1	0	0	0	0	0	0	0	0	0	0	0	37
05:00	122	2	0	0	0	0	0	0	0	0	0	0	0	124
06:00	302	9	0	0	0	0	0	0	0	0	0	0	0	311
07:00	398	15	1	0	0	0	0	0	0	0	0	0	0	414
08:00	340	7	0	0	0	0	0	0	0	0	0	0	0	347
09:00	215	9	0	0	0	0	0	0	0	0	0	0	0	224
10:00	225	5	1	0	0	0	0	0	0	0	0	0	0	231
11:00	258	6	0	0	0	0	0	0	0	0	0	0	0	264
12 PM	262	7	0	0	0	0	0	0	0	0	0	0	0	269
13:00	291	10	0	0	0	0	0	0	0	0	0	0	0	301
14:00	367	9	1	0	0	0	0	0	0	0	0	0	0	377
15:00	339	14	0	0	0	0	0	0	0	0	0	0	0	353
16:00	360	13	1	0	0	0	0	0	0	0	0	0	0	374
17:00	339	8	0	0	0	0	0	0	0	0	0	0	0	347
18:00	254	12	0	0	0	0	0	0	0	0	0	0	0	266
19:00	240	3	0	0	0	0	0	0	0	0	0	0	0	243
20:00	186	2	0	0	0	0	0	0	0	0	0	0	0	188
21:00	159	0	0	0	0	0	0	0	0	0	0	0	0	159
22:00	130	0	0	0	0	0	0	0	0	0	0	0	0	130
23:00	86	0	0	0	0	0	0	0	0	0	0	0	0	86
Total	5017	133	4	0	0	0	0	0	0	0	0	0	0	5154
Percent	97.3%	2.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00											07:00
Vol.	398	15	1											414
PM Peak	14:00	15:00	14:00											14:00
Vol.	367	14	1											377



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	52	0	0	0	0	0	0	0	0	0	0	0	0	52
01:00	60	0	0	0	0	0	0	0	0	0	0	0	0	60
02:00	42	1	0	0	0	0	0	0	0	0	0	0	0	43
03:00	22	0	0	0	0	0	0	0	0	0	0	0	0	22
04:00	26	0	0	0	0	0	0	0	0	0	0	0	0	26
05:00	43	2	0	0	0	0	0	0	0	0	0	0	0	45
06:00	99	2	0	0	0	0	0	0	0	0	0	0	0	101
07:00	134	8	0	0	0	0	0	0	0	0	0	0	0	142
08:00	185	3	0	0	0	0	0	0	0	0	0	0	0	188
09:00	241	5	1	0	0	0	0	0	0	0	0	0	0	247
10:00	273	3	3	0	0	0	0	0	0	0	0	0	0	279
11:00	323	1	0	0	0	0	0	0	0	0	0	0	0	324
12 PM	319	7	0	0	0	0	0	0	0	0	0	0	0	326
13:00	298	1	0	0	0	0	0	0	0	0	0	0	0	299
14:00	283	6	0	0	0	0	0	0	0	0	0	0	0	289
15:00	302	6	0	0	0	0	0	0	0	0	0	0	0	308
16:00	298	1	0	0	0	0	0	0	0	0	0	0	0	299
17:00	310	3	0	0	0	0	0	0	0	0	0	0	0	313
18:00	293	1	1	0	0	0	0	0	0	0	0	0	0	295
19:00	273	1	1	0	0	0	0	0	0	0	0	0	0	275
20:00	191	1	0	0	0	0	0	0	0	0	0	0	0	192
21:00	166	1	0	0	0	0	0	0	0	0	0	0	0	167
22:00	126	0	0	0	0	0	0	0	0	0	0	0	0	126
23:00	78	0	0	0	0	0	0	0	0	0	0	0	0	78
Total	4437	53	6	0	0	0	0	0	0	0	0	0	0	4496
Percent	98.7%	1.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	07:00	10:00											11:00
Vol.	323	8	3											324
PM Peak	12:00	12:00	18:00											12:00
Vol.	319	7	1											326



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175607 J Class  
Site Code: 13796.00

[illegible]



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175607 J Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/1														
7	36	2	0	0	0	0	0	0	0	0	0	0	0	38
01:00	29	0	0	0	0	0	0	0	0	0	0	0	0	29
02:00	26	1	0	0	0	0	0	0	0	0	0	0	0	27
03:00	15	0	0	0	0	0	0	0	0	0	0	0	0	15
04:00	39	1	0	0	0	0	0	0	0	0	0	0	0	40
05:00	115	3	0	0	0	0	0	0	0	0	0	0	0	118
06:00	329	10	1	0	0	0	0	0	0	0	0	0	0	340
07:00	409	14	0	0	0	0	0	0	0	0	0	0	0	423
08:00	340	6	0	0	0	0	0	0	0	0	0	0	0	346
09:00	226	8	0	0	0	0	0	0	0	0	0	0	0	234
10:00	227	8	0	0	0	0	0	0	0	0	0	0	0	235
11:00	245	14	0	0	0	0	0	0	0	0	0	0	0	259
12 PM	267	9	0	0	0	0	0	0	0	0	0	0	0	276
13:00	263	6	0	0	0	0	0	0	0	0	0	0	0	269
14:00	318	7	0	0	0	0	0	0	0	0	0	0	0	325
15:00	320	12	0	0	0	0	0	0	0	0	0	0	0	332
16:00	266	10	0	0	0	0	0	0	0	0	0	0	0	276
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3470	111	1	0	0	0	0	0	0	0	0	0	0	3582
Percent	96.9%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	06:00											07:00
Vol.	409	14	1											423
PM Peak	15:00	15:00												15:00
Vol.	320	12												332



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175607 J Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AM Peak Vol.														
PM Peak Vol.														



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175607 J Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/17														
7:00	60	0	0	0	0	0	0	0	0	0	0	0	0	60
01:00	26	0	0	0	0	0	0	0	0	0	0	0	0	26
02:00	16	1	0	0	0	0	0	0	0	0	0	0	0	17
03:00	7	2	0	0	0	0	0	0	0	0	0	0	0	9
04:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
05:00	25	1	0	0	0	0	0	0	0	0	0	0	0	26
06:00	82	3	0	0	0	0	0	0	0	0	0	0	0	85
07:00	301	11	0	0	0	0	0	0	0	0	0	0	0	312
08:00	215	6	1	0	0	0	0	0	0	0	0	0	0	222
09:00	158	11	0	0	0	0	0	0	0	0	0	0	0	169
10:00	187	11	0	0	0	0	0	0	0	0	0	0	0	198
11:00	256	17	1	0	0	0	0	0	0	0	0	0	0	274
12 PM	316	17	0	0	0	0	0	0	0	0	0	0	0	333
13:00	241	15	0	0	0	0	0	0	0	0	0	0	0	256
14:00	263	8	0	0	0	0	0	0	0	0	0	0	0	271
15:00	357	7	0	0	0	0	0	0	0	0	0	0	0	364
16:00	372	6	1	0	0	0	0	0	0	0	0	0	0	379
17:00	395	6	0	0	0	0	0	0	0	0	0	0	0	401
18:00	376	5	0	0	0	0	0	0	0	0	0	0	0	381
19:00	256	4	0	0	0	0	0	0	0	0	0	0	0	260
20:00	240	1	0	0	0	0	0	0	0	0	0	0	0	241
21:00	178	1	0	0	0	0	0	0	0	0	0	0	0	179
22:00	139	0	1	0	0	0	0	0	0	0	0	0	0	140
23:00	94	0	0	0	0	0	0	0	0	0	0	0	0	94
Total	4567	133	4	0	0	0	0	0	0	0	0	0	0	4704
Percent	97.1%	2.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	11:00	08:00											07:00
Vol.	301	17	1											312
PM Peak	17:00	12:00	16:00											17:00
Vol.	395	17	1											401





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175607 J Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/1														
7	62	0	0	0	0	0	0	0	0	0	0	0	0	62
01:00	26	0	0	0	0	0	0	0	0	0	0	0	0	26
02:00	14	0	0	0	0	0	0	0	0	0	0	0	0	14
03:00	6	1	0	0	0	0	0	0	0	0	0	0	0	7
04:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
05:00	25	2	0	0	0	0	0	0	0	0	0	0	0	27
06:00	96	4	0	0	0	0	0	0	0	0	0	0	0	100
07:00	291	10	0	0	0	0	0	0	0	0	0	0	0	301
08:00	228	4	2	0	0	0	0	0	0	0	0	0	0	234
09:00	165	9	0	0	0	0	0	0	0	0	0	0	0	174
10:00	184	5	0	0	0	0	0	0	0	0	0	0	0	189
11:00	180	7	0	0	0	0	0	0	0	0	0	0	0	187
12 PM	246	11	0	0	0	0	0	0	0	0	0	0	0	257
13:00	247	6	1	0	0	0	0	0	0	0	0	0	0	254
14:00	341	10	0	0	0	0	0	0	0	0	0	0	0	351
15:00	398	13	0	0	0	0	0	0	0	0	0	0	0	411
16:00	407	20	1	0	0	0	0	0	0	0	0	0	0	428
17:00	474	7	0	0	0	0	0	0	0	0	0	0	0	481
18:00	371	6	1	0	0	0	0	0	0	0	0	0	0	378
19:00	301	4	0	0	0	0	0	0	0	0	0	0	0	305
20:00	230	0	0	0	0	0	0	0	0	0	0	0	0	230
21:00	191	1	0	0	0	0	0	0	0	0	0	0	0	192
22:00	151	0	0	0	0	0	0	0	0	0	0	0	0	151
23:00	105	0	0	0	0	0	0	0	0	0	0	0	0	105
Total	4744	120	5	0	0	0	0	0	0	0	0	0	0	4869
Percent	97.4%	2.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	08:00											07:00
Vol.	291	10	2											301
PM Peak	17:00	16:00	13:00											17:00
Vol.	474	20	1											481

[illegible]



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175607 J Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	86	1	0	0	0	0	0	0	0	0	0	0	0	87
01:00	60	0	0	0	0	0	0	0	0	0	0	0	0	60
02:00	45	2	0	0	0	0	0	0	0	0	0	0	0	47
03:00	20	0	0	0	0	0	0	0	0	0	0	0	0	20
04:00	11	0	0	0	0	0	0	0	0	0	0	0	0	11
05:00	22	0	0	0	0	0	0	0	0	0	0	0	0	22
06:00	32	1	0	0	0	0	0	0	0	0	0	0	0	33
07:00	69	3	0	0	0	0	0	0	0	0	0	0	0	72
08:00	128	1	2	0	0	0	0	0	0	0	0	0	0	131
09:00	159	3	0	0	0	0	0	0	0	0	0	0	0	162
10:00	212	6	0	0	0	0	0	0	0	0	0	0	0	218
11:00	256	1	0	0	0	0	0	0	0	0	0	0	0	257
12 PM	261	6	0	0	0	0	0	0	0	0	0	0	0	267
13:00	295	0	0	0	0	0	0	0	0	0	0	0	0	295
14:00	283	5	0	0	0	0	0	0	0	0	0	0	0	288
15:00	358	4	0	0	0	0	0	0	0	0	0	0	0	362
16:00	337	4	0	0	0	0	0	0	0	0	0	0	0	341
17:00	322	2	0	0	0	0	0	0	0	0	0	0	0	324
18:00	259	0	0	0	0	0	0	0	0	0	0	0	0	259
19:00	275	0	0	0	0	0	0	0	0	0	0	0	0	275
20:00	201	1	0	0	0	0	0	0	0	0	0	0	0	202
21:00	181	2	0	0	0	0	0	0	0	0	0	0	0	183
22:00	171	1	0	0	0	0	0	0	0	0	0	0	0	172
23:00	129	1	0	0	0	0	0	0	0	0	0	0	0	130
Total	4172	44	2	0	0	0	0	0	0	0	0	0	0	4218
Percent	98.9%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	08:00											11:00
Vol.	256	6	2											257
PM Peak	15:00	12:00												15:00
Vol.	358	6												362



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/1														
7	116	0	0	0	0	0	0	0	0	0	0	0	0	116
01:00	76	0	0	0	0	0	0	0	0	0	0	0	0	76
02:00	49	1	0	0	0	0	0	0	0	0	0	0	0	50
03:00	33	0	0	0	0	0	0	0	0	0	0	0	0	33
04:00	19	0	0	0	0	0	0	0	0	0	0	0	0	19
05:00	24	0	0	0	0	0	0	0	0	0	0	0	0	24
06:00	33	0	0	0	0	0	0	0	0	0	0	0	0	33
07:00	59	1	0	0	0	0	0	0	0	0	0	0	0	60
08:00	83	0	0	0	0	0	0	0	0	0	0	0	0	83
09:00	153	2	0	0	0	0	0	0	0	0	0	0	0	155
10:00	153	2	0	0	0	0	0	0	0	0	0	0	0	155
11:00	193	1	1	0	0	0	0	0	0	0	0	0	0	195
12 PM	301	1	0	0	0	0	0	0	0	0	0	0	0	302
13:00	274	1	0	0	0	0	0	0	0	0	0	0	0	275
14:00	327	1	0	0	0	0	0	0	0	0	0	0	0	328
15:00	264	2	0	0	0	0	0	0	0	0	0	0	0	266
16:00	261	1	0	0	0	0	0	0	0	0	0	0	0	262
17:00	264	1	0	0	0	0	0	0	0	0	0	0	0	265
18:00	247	1	0	0	0	0	0	0	0	0	0	0	0	248
19:00	232	1	0	0	0	0	0	0	0	0	0	0	0	233
20:00	247	1	0	0	0	0	0	0	0	0	0	0	0	248
21:00	162	2	0	0	0	0	0	0	0	0	0	0	0	164
22:00	128	2	0	0	0	0	0	0	0	0	0	0	0	130
23:00	75	0	0	0	0	0	0	0	0	0	0	0	0	75
Total	3773	21	1	0	0	0	0	0	0	0	0	0	0	3795
Percent	99.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	11:00											11:00
Vol.	193	2	1											195
PM Peak	14:00	15:00												14:00
Vol.	327	2												328



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175607 J Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	40	2	0	0	0	0	0	0	0	0	0	0	0	42
01:00	33	1	0	0	0	0	0	0	0	0	0	0	0	34
02:00	19	1	0	0	0	0	0	0	0	0	0	0	0	20
03:00	11	1	0	0	0	0	0	0	0	0	0	0	0	12
04:00	11	0	1	0	0	0	0	0	0	0	0	0	0	12
05:00	29	2	0	0	0	0	0	0	0	0	0	0	0	31
06:00	102	6	0	0	0	0	0	0	0	0	0	0	0	108
07:00	300	10	1	0	0	0	0	0	0	0	0	0	0	311
08:00	248	4	0	0	0	0	0	0	0	0	0	0	0	252
09:00	162	5	0	0	0	0	0	0	0	0	0	0	0	167
10:00	213	4	0	0	0	0	0	0	0	0	0	0	0	217
11:00	214	12	0	0	0	0	0	0	0	0	0	0	0	226
12 PM	238	4	0	0	0	0	0	0	0	0	0	0	0	242
13:00	255	5	0	0	0	0	0	0	0	0	0	0	0	260
14:00	348	13	0	0	0	0	0	0	0	0	0	0	0	361
15:00	412	11	1	0	0	0	0	0	0	0	0	0	0	424
16:00	258	10	0	0	0	0	0	0	0	0	0	0	0	268
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2893	91	3	0	0	0	0	0	0	0	0	0	0	2987
Percent	96.9%	3.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	11:00	04:00											07:00
Vol.	300	12	1											311
PM Peak	15:00	14:00	15:00											15:00
Vol.	412	13	1											424

[illegible]



PRECISION  
D A T A  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

North Shore Road  
north of Winthrop Avenue (Route 145)  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 J Volume  
Site Code: 13796.00

Start Time	5/3/2017		5/4/2017		5/5/2017		5/6/2017		5/7/2017		5/8/2017		5/9/2017		Week Average	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	21	60	33	62	28	69	52	87	81	116	38	42	0	0	36	62
01:00	17	26	26	26	45	36	60	60	99	76	29	34	0	0	39	37
02:00	29	17	19	14	23	24	43	47	66	50	27	20	0	0	30	25
03:00	13	9	17	7	13	13	22	20	31	33	15	12	0	0	16	13
04:00	43	7	34	5	37	10	26	11	22	19	40	12	0	0	29	9
05:00	113	26	114	27	124	28	45	22	44	24	118	31	0	0	80	23
06:00	351	85	341	100	311	99	101	33	63	33	340	108	0	0	215	65
07:00	392	312	429	301	414	314	142	72	103	60	423	311	0	0	272	196
08:00	368	222	344	234	347	250	188	131	128	83	346	252	0	0	246	167
09:00	258	169	255	174	224	178	247	162	209	155	234	167	0	0	204	144
10:00	248	198	221	189	231	202	279	218	237	155	235	217	0	0	207	168
11:00	263	274	236	187	264	244	324	257	248	195	259	226	0	0	228	198
12:00 PM	463	333	271	257	269	242	326	267	303	302	276	242	0	0	273	235
01:00	302	256	277	254	301	263	299	295	287	275	269	260	0	0	248	229
02:00	288	271	328	351	377	367	289	288	292	328	325	361	0	0	271	281
03:00	264	364	332	411	353	442	308	362	306	266	332	424	0	0	271	324
04:00	295	379	410	428	374	387	299	341	246	262	276	268	0	0	271	295
05:00	321	401	396	481	347	517	313	324	250	265	0	0	0	0	232	284
06:00	314	381	318	378	266	372	295	259	241	248	0	0	0	0	205	234
07:00	271	260	232	305	243	300	275	275	218	233	0	0	0	0	177	196
08:00	181	241	206	230	188	216	192	202	206	248	0	0	0	0	139	162
09:00	119	179	142	192	159	200	167	183	151	164	0	0	0	0	105	131
10:00	99	140	112	151	130	152	126	172	109	130	0	0	0	0	82	106
11:00	52	94	56	105	86	134	78	130	56	75	0	0	0	0	47	77
Total	5085	4704	5149	4869	5154	5059	4496	4218	3996	3795	3582	2987	0	0	3923	3661
Day	9789		10018		10213		8714		7791		6569		0		7584	
AM Peak	07:00	07:00	07:00	07:00	07:00	07:00	11:00	11:00	11:00	11:00	07:00	07:00	-	-	07:00	11:00
Vol.	392	312	429	301	414	314	324	257	248	195	423	311	-	-	272	198
PM Peak	12:00	17:00	16:00	17:00	14:00	17:00	12:00	15:00	15:00	14:00	15:00	15:00	-	-	12:00	15:00
Vol.	463	401	410	481	377	517	326	362	306	328	332	424	-	-	273	324

Comb. Total	9789	10018	10213	8714	7791	6569	0	7584
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ADT	ADT 7,585	AADT 7,585
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PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
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North Shore Road  
north of Winthrop Avenue (Route 145)  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 J Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/3/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Wed	
12:00	4	122	23	101	27	223		
12:15	5	126	16	85	21	211		
12:30	5	87	10	82	15	169		
12:45	7	128	11	60	65	333	81	796
01:00	6	73	5	53	11	126		
01:15	3	76	6	69	9	145		
01:30	5	87	8	66	13	153		
01:45	3	66	7	26	68	256	43	558
02:00	9	74	5	61	14	135		
02:15	6	76	6	77	12	153		
02:30	9	59	2	72	11	131		
02:45	5	79	4	17	61	271	46	559
03:00	1	73	3	87	4	160		
03:15	2	61	2	96	4	157		
03:30	5	72	1	86	6	158		
03:45	5	58	3	9	95	364	22	628
04:00	7	71	0	96	7	167		
04:15	8	64	1	97	9	161		
04:30	13	87	3	88	16	175		
04:45	15	73	3	7	98	379	50	674
05:00	9	76	5	105	14	181		
05:15	24	88	5	88	29	176		
05:30	40	79	8	98	48	177		
05:45	40	78	8	26	110	401	139	722
06:00	54	85	11	94	65	179		
06:15	91	88	18	101	109	189		
06:30	95	70	21	100	116	170		
06:45	111	71	35	85	86	381	436	695
07:00	99	60	57	78	156	138		
07:15	124	66	94	70	218	136		
07:30	95	89	68	64	163	153		
07:45	74	56	93	312	48	260	704	531
08:00	97	51	65	71	162	122		
08:15	110	43	55	65	165	108		
08:30	93	45	52	55	145	100		
08:45	68	42	50	222	50	241	590	422
09:00	70	38	49	46	119	84		
09:15	58	29	35	46	93	75		
09:30	62	36	38	54	100	90		
09:45	68	16	47	169	33	179	427	298
10:00	59	34	53	42	112	76		
10:15	52	25	49	43	101	68		
10:30	74	27	48	26	122	53		
10:45	63	13	48	198	29	140	446	239
11:00	59	13	65	37	124	50		
11:15	61	18	68	26	129	44		
11:30	84	12	66	15	150	27		
11:45	59	9	75	274	16	94	537	146
Total	2116	2969	1405	3299	3521	6268		
Percent	60.1%	47.4%	39.9%	52.6%				
Day Total		5085		4704		9789		
Peak	06:30	-	12:00	-	07:15	-	12:00	-
Vol.	429	-	463	-	320	-	796	-
P.H.F.	0.865	-	0.904	-	0.851	-	0.892	-





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North Shore Road  
north of Winthrop Avenue (Route 145)  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 J Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/4/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Thu	
12:00	6	67	21	65	27	132		
12:15	11	67	20	63	31	130		
12:30	9	66	14	69	23	135		
12:45	7	71	7	62	14	131	528	
01:00	4	59	9	65	13	124		
01:15	10	64	10	48	20	112		
01:30	3	86	2	56	5	142		
01:45	9	68	5	26	85	153	531	
02:00	6	85	3	79	9	164		
02:15	4	73	4	78	8	151		
02:30	3	63	2	111	5	174		
02:45	6	107	5	14	83	190	679	
03:00	1	89	1	59	2	148		
03:15	3	70	4	102	7	172		
03:30	8	95	0	119	8	214		
03:45	5	78	2	7	131	209	743	
04:00	9	137	0	97	9	234		
04:15	6	82	0	107	6	189		
04:30	9	98	3	108	12	206		
04:45	10	93	2	5	116	209	838	
05:00	18	100	4	118	22	218		
05:15	22	100	7	121	29	221		
05:30	35	93	5	123	40	216		
05:45	39	103	11	27	119	222	877	
06:00	53	81	13	93	66	174		
06:15	83	92	14	92	97	184		
06:30	90	70	38	98	128	168		
06:45	115	75	35	100	95	170	696	
07:00	113	69	63	92	176	161		
07:15	135	64	95	84	230	148		
07:30	100	46	67	68	167	114		
07:45	81	53	76	301	61	114	537	
08:00	106	57	77	48	183	105		
08:15	111	51	71	66	182	117		
08:30	77	47	44	63	121	110		
08:45	50	51	42	234	53	104	436	
09:00	64	37	38	59	102	96		
09:15	56	39	39	47	95	86		
09:30	64	26	42	38	106	64		
09:45	71	40	55	174	48	88	334	
10:00	58	28	43	49	101	77		
10:15	58	32	48	29	106	61		
10:30	61	29	51	34	112	63		
10:45	44	23	47	189	39	62	263	
11:00	59	13	42	26	101	39		
11:15	50	16	56	30	106	46		
11:30	66	19	45	28	111	47		
11:45	61	8	44	187	21	29	161	
Total	2069	3080	1326	3543	3395	6623		
Percent	60.9%	46.5%	39.1%	53.5%				
Day Total		5149		4869		10018		
Peak	06:45	-	04:00	-	07:15	-	05:00	-
Vol.	463	-	410	-	315	-	481	-
P.H.F.	0.857	-	0.748	-	0.829	-	0.978	-



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North Shore Road  
north of Winthrop Avenue (Route 145)  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 J Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/5/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	11	71	20	55	31	126		
12:15	3	59	24	57	27	116		
12:30	8	67	17	63	25	130		
12:45	6	28 72	269 8	69 67	242 14	97 139	511	
01:00	9	78	6	64	15	142		
01:15	8	66	11	52	19	118		
01:30	13	93	12	67	25	160		
01:45	15	45 64	301 7	36 80	263 22	81 144	564	
02:00	4	96	9	82	13	178		
02:15	8	94	8	97	16	191		
02:30	7	77	6	105	13	182		
02:45	4	23 110	377 1	24 83	367 5	47 193	744	
03:00	3	91	8	94	11	185		
03:15	2	76	0	100	2	176		
03:30	3	94	1	105	4	199		
03:45	5	13 92	353 4	13 143	442 9	26 235	795	
04:00	5	140	0	81	5	221		
04:15	9	79	2	91	11	170		
04:30	10	85	1	105	11	190		
04:45	13	37 70	374 7	10 110	387 20	47 180	761	
05:00	22	89	5	137	27	226		
05:15	25	84	4	121	29	205		
05:30	27	92	10	128	37	220		
05:45	50	124 82	347 9	28 131	517 59	152 213	864	
06:00	57	84	16	111	73	195		
06:15	74	62	23	92	97	154		
06:30	93	46	24	83	117	129		
06:45	87	311 74	266 36	99 86	372 123	410 160	638	
07:00	105	61	65	78	170	139		
07:15	150	80	101	82	251	162		
07:30	87	60	83	64	170	124		
07:45	72	414 42	243 65	314 76	300 137	728 118	543	
08:00	97	55	79	69	176	124		
08:15	110	47	73	50	183	97		
08:30	88	42	57	50	145	92		
08:45	52	347 44	188 41	250 47	216 93	597 91	404	
09:00	59	43	42	53	101	96		
09:15	58	46	38	59	96	105		
09:30	39	36	45	47	84	83		
09:45	68	224 34	159 53	178 41	200 121	402 75	359	
10:00	53	35	52	42	105	77		
10:15	54	33	57	40	111	73		
10:30	82	32	54	35	136	67		
10:45	42	231 30	130 39	202 35	152 81	433 65	282	
11:00	56	19	60	33	116	52		
11:15	74	26	70	45	144	71		
11:30	63	26	62	30	125	56		
11:45	71	264 15	86 52	244 26	134 123	508 41	220	
Total	2061	3093	1467	3592	3528	6685		
Percent	58.4%	46.3%	41.6%	53.7%				
Day Total		5154		5059		10213		
Peak	06:30	-	03:30	-	07:15	-	05:00	-
Vol.	435	-	405	-	328	-	517	-
P.H.F.	0.725	-	0.723	-	0.812	-	0.943	-



PRECISION  
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North Shore Road  
north of Winthrop Avenue (Route 145)  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 J Volume  
Site Code: 13796.00

Start	SB				NB				Combin ed		5/6/2017	
Time	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.	Sat	
12:00	10		76		18		69		28	145		
12:15	12		73		24		48		36	121		
12:30	18		76		26		79		44	155		
12:45	12	52	101	326	19	87	71	267	31	172	593	
01:00	10		72		17		75		27	147		
01:15	17		78		16		66		33	144		
01:30	6		74		14		69		20	143		
01:45	27	60	75	299	13	60	85	295	40	160	594	
02:00	17		66		12		76		29	142		
02:15	11		77		12		71		23	148		
02:30	9		80		10		59		19	139		
02:45	6	43	66	289	13	47	82	288	19	148	577	
03:00	4		78		5		90		9	168		
03:15	6		69		5		81		11	150		
03:30	6		82		5		83		11	165		
03:45	6	22	79	308	5	20	108	362	11	187	670	
04:00	6		72		1		77		7	149		
04:15	3		73		2		93		5	166		
04:30	7		85		4		91		11	176		
04:45	10	26	69	299	4	11	80	341	14	149	640	
05:00	9		85		6		82		15	167		
05:15	12		67		6		85		18	152		
05:30	11		85		4		85		15	170		
05:45	13	45	76	313	6	22	72	324	19	148	637	
06:00	20		81		9		63		29	144		
06:15	28		72		6		73		34	145		
06:30	27		79		9		59		36	138		
06:45	26	101	63	295	9	33	64	259	35	127	554	
07:00	43		73		14		73		57	146		
07:15	31		63		13		77		44	140		
07:30	34		71		14		67		48	138		
07:45	34	142	68	275	31	72	58	275	65	126	550	
08:00	42		38		26		44		68	82		
08:15	37		60		36		63		73	123		
08:30	61		44		27		56		88	100		
08:45	48	188	50	192	42	131	39	202	90	89	394	
09:00	58		53		30		54		88	107		
09:15	53		39		38		44		91	83		
09:30	69		42		42		47		111	89		
09:45	67	247	33	167	52	162	38	183	119	71	350	
10:00	68		32		50		39		118	71		
10:15	63		36		55		51		118	87		
10:30	85		33		60		38		145	71		
10:45	63	279	25	126	53	218	44	172	116	69	298	
11:00	84		24		60		35		144	59		
11:15	64		20		76		31		140	51		
11:30	92		18		59		37		151	55		
11:45	84	324	16	78	62	257	27	130	146	43	208	
Total	1529		2967		1120		3098		2649	6065		
Percent	57.7%		48.9%		42.3%		51.1%					
Day Total		4496			4218				8714			
Peak	11:00	-	00:30	-	11:00	-	03:45	-	11:00	-	03:45	-
Vol.	324	-	327	-	257	-	369	-	581	-	678	-
P.H.F.	0.880		0.809		0.845		0.854		0.962		0.906	



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North Shore Road  
north of Winthrop Avenue (Route 145)  
City, State: Revere, MA  
Client: VHB/ A. Berthaume

175607 J Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/7/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sun	
12:00	10	74	22	60	32	134		
12:15	17	85	29	70	46	155		
12:30	26	72	32	97	58	169		
12:45	28	81 72 303	33 116	75 302	61 197	147 605		
01:00	20	72	22	73	42	145		
01:15	22	72	18	68	40	140		
01:30	17	71	18	56	35	127		
01:45	40	99 72 287	18 76	78 275	58 175	150 562		
02:00	27	72	14	102	41	174		
02:15	16	92	15	70	31	162		
02:30	11	66	12	86	23	152		
02:45	12	66 62 292	9 50	70 328	21 116	132 620		
03:00	9	66	9	69	18	135		
03:15	6	93	14	68	20	161		
03:30	6	79	5	61	11	140		
03:45	10	31 68 306	5 33	68 266	15 64	136 572		
04:00	7	60	6	78	13	138		
04:15	4	57	7	75	11	132		
04:30	7	55	3	50	10	105		
04:45	4	22 74 246	3 19	59 262	7 41	133 508		
05:00	5	64	5	70	10	134		
05:15	12	59	5	60	17	119		
05:30	9	65	5	69	14	134		
05:45	18	44 62 250	9 24	66 265	27 68	128 515		
06:00	16	70	9	60	25	130		
06:15	13	58	5	68	18	126		
06:30	11	48	10	58	21	106		
06:45	23	63 65 241	9 33	62 248	32 96	127 489		
07:00	18	52	14	50	32	102		
07:15	29	61	12	74	41	135		
07:30	24	46	22	57	46	103		
07:45	32	103 59 218	12 60	52 233	44 163	111 451		
08:00	30	59	18	60	48	119		
08:15	28	43	20	63	48	106		
08:30	35	56	24	69	59	125		
08:45	35	128 48 206	21 83	56 248	56 211	104 454		
09:00	40	51	27	51	67	102		
09:15	50	37	42	40	92	77		
09:30	57	31	35	35	92	66		
09:45	62	209 32 151	51 155	38 164	113 364	70 315		
10:00	64	31	29	46	93	77		
10:15	52	29	36	25	88	54		
10:30	53	28	44	29	97	57		
10:45	68	237 21 109	46 155	30 130	114 392	51 239		
11:00	72	12	44	19	116	31		
11:15	45	20	45	28	90	48		
11:30	61	20	59	15	120	35		
11:45	70	248 4 56	47 195	13 75	117 443	17 131		
Total	1331	2665	999	2796	2330	5461		
Percent	57.1%	48.8%	42.9%	51.2%				
Day Total		3996		3795		7791		
Peak	11:00	- 01:30	- 11:00	- 01:45	- 11:00	- 01:45	- -	-
Vol.	248	- 307	- 195	- 336	- 443	- 638	- -	-
P.H.F.	0.861	- 0.834	- 0.826	- 0.824	- 0.923	- 0.917	- -	-



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175607 J Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/8/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Mon	
12:00	11	76	19	52	30	128		
12:15	7	67	11	60	18	127		
12:30	8	78	9	53	17	131		
12:45	12	55	3	77	15	132	518	
01:00	3	74	11	59	14	133		
01:15	5	51	5	59	10	110		
01:30	12	84	8	58	20	142		
01:45	9	60	10	84	19	144	529	
02:00	8	79	10	84	18	163		
02:15	7	65	6	85	13	150		
02:30	7	68	3	100	10	168		
02:45	5	113	1	92	6	205	686	
03:00	4	91	2	96	6	187		
03:15	4	84	3	105	7	189		
03:30	0	82	2	98	2	180		
03:45	7	75	5	125	12	200	756	
04:00	9	138	1	96	10	234		
04:15	5	90	6	103	11	193		
04:30	9	48	3	69	12	117		
04:45	17	0	2	0	19	0	544	
05:00	26	0	6	0	32	0		
05:15	20	0	6	0	26	0		
05:30	36	0	5	0	41	0		
05:45	36	0	14	0	50	0	0	
06:00	57	0	14	0	71	0		
06:15	92	0	26	0	118	0		
06:30	99	0	28	0	127	0		
06:45	92	0	40	0	132	0	0	
07:00	121	0	73	0	194	0		
07:15	120	0	86	0	206	0		
07:30	101	0	64	0	165	0		
07:45	81	0	88	0	169	0	0	
08:00	97	0	77	0	174	0		
08:15	102	0	80	0	182	0		
08:30	77	0	46	0	123	0		
08:45	70	0	49	0	119	0	0	
09:00	61	0	33	0	94	0		
09:15	69	0	46	0	115	0		
09:30	45	0	37	0	82	0		
09:45	59	0	51	0	110	0	0	
10:00	52	0	53	0	105	0		
10:15	61	0	57	0	118	0		
10:30	60	0	53	0	113	0		
10:45	62	0	54	0	116	0	0	
11:00	63	0	52	0	115	0		
11:15	58	0	45	0	103	0		
11:30	62	0	78	0	140	0		
11:45	76	0	51	0	127	0	0	
Total	2104	1478	1432	1555	3536	3033		
Percent	59.5%	48.7%	40.5%	51.3%				
Day Total		3582		2987		6569		
Peak	06:45	-	03:30	-	07:15	-	03:00	-
Vol.	434	-	385	-	315	-	424	-
P.H.F.	0.897	-	0.697	-	0.895	-	0.848	-



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

North Shore Road  
north of Winthrop Avenue (Route 145)  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 J Volume  
Site Code: 13796.00

Start	SB				NB				Combin ed		5/9/2017			
Time	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.	Tue			
12:00	0		0		0		0		0	0				
12:15	0		0		0		0		0	0				
12:30	0		0		0		0		0	0				
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0		0		0		0		0	0				
01:15	0		0		0		0		0	0				
01:30	0		0		0		0		0	0				
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0		0		0		0		0	0				
02:15	0		0		0		0		0	0				
02:30	0		0		0		0		0	0				
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0		0		0		0		0	0				
03:15	0		0		0		0		0	0				
03:30	0		0		0		0		0	0				
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0		0		0		0		0	0				
04:15	0		0		0		0		0	0				
04:30	0		0		0		0		0	0				
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0		0		0		0		0	0				
05:15	0		0		0		0		0	0				
05:30	0		0		0		0		0	0				
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0		0		0		0		0	0				
06:15	0		0		0		0		0	0				
06:30	0		0		0		0		0	0				
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0		0		0		0		0	0				
07:15	0		0		0		0		0	0				
07:30	0		0		0		0		0	0				
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0		0		0		0		0	0				
08:15	0		0		0		0		0	0				
08:30	0		0		0		0		0	0				
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0		0		0		0		0	0				
09:15	0		0		0		0		0	0				
09:30	0		0		0		0		0	0				
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0		0		0		0		0	0				
10:15	0		0		0		0		0	0				
10:30	0		0		0		0		0	0				
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0		0		0		0		0	0				
11:15	0		0		0		0		0	0				
11:30	0		0		0		0		0	0				
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0		0		0		0		0	0				
Percent	0.0%		0.0%		0.0%		0.0%							
Day Total		0				0				0				
Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vol.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P.H.F.														



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/1														
7	144	4	3	0	0	0	0	0	0	0	0	0	0	151
01:00	134	1	5	0	0	0	0	0	0	0	0	0	0	140
02:00	147	8	8	0	0	0	0	0	0	0	0	0	0	163
03:00	212	17	13	0	0	0	0	0	0	0	0	0	0	242
04:00	473	23	33	0	0	0	0	0	0	0	0	0	0	529
05:00	2364	50	52	0	0	0	0	0	0	0	0	0	0	2466
06:00	3334	83	32	0	0	0	0	0	0	0	0	0	0	3449
07:00	3254	97	28	0	0	0	0	0	0	0	0	0	0	3379
08:00	3018	67	37	0	0	0	0	0	0	0	0	0	0	3122
09:00	2654	70	40	0	0	0	0	0	0	0	0	0	0	2764
10:00	2026	54	63	0	0	0	0	0	0	0	0	0	0	2143
11:00	1535	56	40	0	0	0	0	0	0	0	0	0	0	1631
12 PM	1597	62	34	0	0	0	0	0	0	0	0	0	0	1693
13:00	1570	74	27	0	0	0	0	0	0	0	0	0	0	1671
14:00	1634	60	28	0	0	0	0	0	0	0	0	0	0	1722
15:00	1633	54	15	0	0	0	0	0	0	0	0	0	0	1702
16:00	1745	37	13	0	0	0	0	0	0	0	0	0	0	1795
17:00	1835	16	10	0	0	0	0	0	0	0	0	0	0	1861
18:00	1599	24	7	0	0	0	0	0	0	0	0	0	0	1630
19:00	1183	17	9	0	0	0	0	0	0	0	0	0	0	1209
20:00	1061	12	11	0	0	0	0	0	0	0	0	0	0	1084
21:00	770	14	6	0	0	0	0	0	0	0	0	0	0	790
22:00	593	6	8	0	0	0	0	0	0	0	0	0	0	607
23:00	333	7	3	0	0	0	0	0	0	0	0	0	0	343
Total	34848	913	525	0	0	0	0	0	0	0	0	0	0	36286
Percent	96.0%	2.5%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	10:00											06:00
Vol.	3334	97	63											3449
PM Peak	17:00	13:00	12:00											17:00
Vol.	1835	74	34											1861



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175607 K Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/17														
7:00	189	6	4	0	0	0	0	0	0	0	0	0	0	199
01:00	114	2	6	0	0	0	0	0	0	0	0	0	0	122
02:00	161	6	8	0	0	0	0	0	0	0	0	0	0	175
03:00	196	12	21	0	0	0	0	0	0	0	0	0	0	229
04:00	481	21	32	0	0	0	0	0	0	0	0	0	0	534
05:00	2399	67	57	0	0	0	0	0	0	0	0	0	0	2523
06:00	3509	92	36	0	0	0	0	0	0	0	0	0	0	3637
07:00	3418	86	25	0	0	0	0	0	0	0	0	0	0	3529
08:00	3050	79	30	0	0	0	0	0	0	0	0	0	0	3159
09:00	2720	86	53	0	0	0	0	0	0	0	0	0	0	2859
10:00	2010	58	45	0	0	0	0	0	0	0	0	0	0	2113
11:00	1645	58	39	0	0	0	0	0	0	0	0	0	0	1742
12 PM	1511	117	55	0	0	0	0	0	0	0	0	0	0	1683
13:00	1554	73	24	0	0	0	0	0	0	0	0	0	0	1651
14:00	1694	69	22	0	0	0	0	0	0	0	0	0	0	1785
15:00	1736	48	11	0	0	0	0	0	0	0	0	0	0	1795
16:00	1773	27	10	0	0	0	0	0	0	0	0	0	0	1810
17:00	1951	19	4	0	0	0	0	0	0	0	0	0	0	1974
18:00	1710	20	3	0	0	0	0	0	0	0	0	0	0	1733
19:00	1257	13	11	0	0	0	0	0	0	0	0	0	0	1281
20:00	1077	16	10	0	0	0	0	0	0	0	0	0	0	1103
21:00	728	10	8	0	0	0	0	0	0	0	0	0	0	746
22:00	633	8	5	0	0	0	0	0	0	0	0	0	0	646
23:00	389	1	5	0	0	0	0	0	0	0	0	0	0	395
Total	35905	994	524	0	0	0	0	0	0	0	0	0	0	37423
Percent	95.9%	2.7%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	06:00	05:00											06:00
Vol.	3509	92	57											3637
PM Peak	17:00	12:00	12:00											17:00
Vol.	1951	117	55											1974





Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/1														
7	204	3	1	0	0	0	0	0	0	0	0	0	0	208
01:00	145	5	3	0	0	0	0	0	0	0	0	0	0	153
02:00	155	7	3	0	0	0	0	0	0	0	0	0	0	165
03:00	203	16	17	0	0	0	0	0	0	0	0	0	0	236
04:00	438	18	32	0	0	0	0	0	0	0	0	0	0	488
05:00	2169	65	66	0	0	0	0	0	0	0	0	0	0	2300
06:00	3473	69	59	0	0	0	0	0	0	0	0	0	0	3601
07:00	2938	81	28	0	0	0	0	0	0	0	0	0	0	3047
08:00	2760	71	48	0	0	0	0	0	0	0	0	0	0	2879
09:00	2291	74	50	0	0	0	0	0	0	0	0	0	0	2415
10:00	1869	50	45	0	0	0	0	0	0	0	0	0	0	1964
11:00	1666	76	47	0	0	0	0	0	0	0	0	0	0	1789
12 PM	1629	56	41	0	0	0	0	0	0	0	0	0	0	1726
13:00	1693	58	20	0	0	1693	0	0	0	0	0	0	0	1771
14:00	1744	68	14	0	0	0	0	0	0	0	0	0	0	1826
15:00	1663	48	8	0	0	0	0	0	0	0	0	0	0	1719
16:00	1659	44	11	0	0	0	0	0	0	0	0	0	0	1714
17:00	1597	20	5	0	0	0	0	0	0	0	0	0	0	1622
18:00	1437	12	6	0	0	0	0	0	0	0	0	0	0	1455
19:00	1155	11	2	0	0	0	0	0	0	0	0	0	0	1168
20:00	968	4	1	0	0	0	0	0	0	0	0	0	0	973
21:00	928	2	5	0	0	0	0	0	0	0	0	0	0	935
22:00	737	5	5	0	0	0	0	0	0	0	0	0	0	747
23:00	519	8	5	0	0	0	0	0	0	0	0	0	0	532
Total	34040	871	522	0	0	0	0	0	0	0	0	0	0	35433
Percent	96.1%	2.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	05:00											06:00
Vol.	3473	81	66											3601
PM Peak	14:00	14:00	12:00											14:00
Vol.	1744	68	41											1826



175607 K Class  
Site Code: 13796.00

Route 1  
between Squire Road (Rt 60) Ramps  
City, State: Revere, MA  
Client: VHB/ A. Berthaume  
SB

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17	302	4	2	0	0	0	0	0	0	0	0	0	0	308
01:00	211	4	3	0	0	0	0	0	0	0	0	0	0	218
02:00	150	7	4	0	0	0	0	0	0	0	0	0	0	161
03:00	189	11	7	0	0	0	0	0	0	0	0	0	0	207
04:00	218	10	11	0	0	0	0	0	0	0	0	0	0	239
05:00	579	17	10	0	0	0	0	0	0	0	0	0	0	606
06:00	1031	34	13	0	0	0	0	0	0	0	0	0	0	1078
07:00	1189	43	10	0	0	0	0	0	0	0	0	0	0	1242
08:00	1380	40	8	0	0	0	0	0	0	0	0	0	0	1428
09:00	1665	34	21	0	0	0	0	0	0	0	0	0	0	1720
10:00	1849	31	9	0	0	0	0	0	0	0	0	0	0	1889
11:00	2085	38	9	0	0	0	0	0	0	0	0	0	0	2132
12 PM	2163	30	6	0	0	0	0	0	0	0	0	0	0	2199
13:00	2097	26	10	0	0	0	0	0	0	0	0	0	0	2133
14:00	2391	22	4	0	0	0	0	0	0	0	0	0	0	2417
15:00	2218	11	2	0	0	0	0	0	0	0	0	0	0	2231
16:00	2235	17	3	0	0	0	0	0	0	0	0	0	0	2255
17:00	2071	10	2	0	0	0	0	0	0	0	0	0	0	2083
18:00	1971	14	2	0	0	0	0	0	0	0	0	0	0	1987
19:00	1613	8	2	0	0	0	0	0	0	0	0	0	0	1623
20:00	1332	3	2	0	0	0	0	0	0	0	0	0	0	1337
21:00	1219	3	3	0	0	0	0	0	0	0	0	0	0	1225
22:00	928	5	4	0	0	0	0	0	0	0	0	0	0	937
23:00	663	4	2	0	0	0	0	0	0	0	0	0	0	669
Total	31749	426	149	0	0	0	0	0	0	0	0	0	0	32324
Percent	98.2%	1.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	07:00	09:00											11:00
Vol.	2085	43	21											2132
PM Peak	14:00	12:00	13:00											14:00
Vol.	2391	30	10											2417



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/17														
7:00	462	1	1	0	0	0	0	0	0	0	0	0	0	464
01:00	296	3	2	0	0	0	0	0	0	0	0	0	0	301
02:00	198	3	1	0	0	0	0	0	0	0	0	0	0	202
03:00	164	0	0	0	0	0	0	0	0	0	0	0	0	164
04:00	126	1	1	0	0	0	0	0	0	0	0	0	0	128
05:00	270	3	6	0	0	0	0	0	0	0	0	0	0	279
06:00	646	13	7	0	0	0	0	0	0	0	0	0	0	666
07:00	762	11	3	0	0	0	0	0	0	0	0	0	0	776
08:00	999	18	2	0	0	0	0	0	0	0	0	0	0	1019
09:00	1344	17	6	0	0	0	0	0	0	0	0	0	0	1367
10:00	1705	17	6	0	0	0	0	0	0	0	0	0	0	1728
11:00	1977	19	1	0	0	0	0	0	0	0	0	0	0	1997
12 PM	2223	7	2	0	0	0	0	0	0	0	0	0	0	2232
13:00	2341	12	4	0	0	0	0	0	0	0	0	0	0	2357
14:00	2406	10	3	0	0	0	0	0	0	0	0	0	0	2419
15:00	2265	7	3	0	0	0	0	0	0	0	0	0	0	2275
16:00	2343	8	3	0	0	0	0	0	0	0	0	0	0	2354
17:00	2278	8	4	0	0	0	0	0	0	0	0	0	0	2290
18:00	1979	5	6	0	0	0	0	0	0	0	0	0	0	1990
19:00	1426	8	6	0	0	0	0	0	0	0	0	0	0	1440
20:00	1170	3	2	0	0	0	0	0	0	0	0	0	0	1175
21:00	866	0	7	0	0	0	0	0	0	0	0	0	0	873
22:00	597	8	3	0	0	0	0	0	0	0	0	0	0	608
23:00	322	2	3	0	0	0	0	0	0	0	0	0	0	327
Total	29165	184	82	0	0	0	0	0	0	0	0	0	0	29431
Percent	99.1%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	06:00											11:00
Vol.	1977	19	7											1997
PM Peak	14:00	13:00	21:00											14:00
Vol.	2406	12	7											2419



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/17														
7:00	150	3	3	0	0	0	0	0	0	0	0	0	0	156
01:00	150	6	11	0	0	0	0	0	0	0	0	0	0	167
02:00	115	9	8	0	0	0	0	0	0	0	0	0	0	132
03:00	206	11	16	0	0	0	0	0	0	0	0	0	0	233
04:00	516	25	32	0	0	0	0	0	0	0	0	0	0	573
05:00	2380	54	51	0	0	0	0	0	0	0	0	0	0	2485
06:00	3550	83	36	0	0	0	0	0	0	0	0	0	0	3669
07:00	3369	104	29	0	0	0	0	0	0	0	0	0	0	3502
08:00	2968	57	52	0	0	0	0	0	0	0	0	0	0	3077
09:00	2439	73	47	0	0	0	0	0	0	0	0	0	0	2559
10:00	1798	85	53	0	0	0	0	0	0	0	0	0	0	1936
11:00	1650	62	47	0	0	1650	0	0	0	0	0	0	0	1759
12 PM	1558	69	35	0	0	0	0	0	0	0	0	0	0	1662
13:00	1509	63	31	0	0	0	0	0	0	0	0	0	0	1603
14:00	1595	84	20	0	0	0	0	0	0	0	0	0	0	1699
15:00	1626	60	14	0	0	1626	0	0	0	0	0	0	0	1700
16:00	1518	39	11	0	0	0	0	0	0	0	0	0	0	1568
17:00	1688	23	4	0	0	0	0	0	0	0	0	0	0	1715
18:00	1509	22	8	0	0	0	0	0	0	0	0	0	0	1539
19:00	1155	17	10	0	0	0	0	0	0	0	0	0	0	1182
20:00	939	6	4	0	0	0	0	0	0	0	0	0	0	949
21:00	761	10	5	0	0	0	0	0	0	0	0	0	0	776
22:00	506	3	4	0	0	0	0	0	0	0	0	0	0	513
23:00	272	4	4	0	0	0	0	0	0	0	0	0	0	280
Total	33927	972	535	0	0	0	0	0	0	0	0	0	0	35434
Percent	95.7%	2.7%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	10:00											06:00
Vol.	3550	104	53											3669
PM Peak	17:00	14:00	12:00											17:00
Vol.	1688	84	35											1715



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Site Code: 13796.00

[illegible]



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175607 K Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/03/1														
7	388	5	0	0	0	0	0	0	0	0	0	0	0	393
01:00	188	5	6	0	0	0	0	0	0	0	0	0	0	199
02:00	128	8	8	0	0	0	0	0	0	0	0	0	0	144
03:00	82	6	8	0	0	0	0	0	0	0	0	0	0	96
04:00	155	10	26	0	0	0	0	0	0	0	0	0	0	191
05:00	422	35	32	0	0	0	0	0	0	0	0	0	0	489
06:00	906	53	36	0	0	0	0	0	0	0	0	0	0	995
07:00	1443	39	45	0	0	0	0	0	0	0	0	0	0	1527
08:00	1333	60	39	0	0	0	0	0	0	0	0	0	0	1432
09:00	1093	75	48	0	0	0	0	0	0	0	0	0	0	1216
10:00	1161	71	44	0	0	0	0	0	0	0	0	0	0	1276
11:00	1477	74	45	0	0	0	0	0	0	0	0	0	0	1596
12 PM	1734	92	61	0	0	0	0	0	0	0	0	0	0	1887
13:00	1958	88	34	0	0	0	0	0	0	0	0	0	0	2080
14:00	2403	73	28	0	0	0	0	0	0	0	0	0	0	2504
15:00	2321	60	25	0	0	0	0	0	0	0	0	0	0	2406
16:00	2497	45	18	0	0	0	0	0	0	0	0	0	0	2560
17:00	2611	31	8	0	0	0	0	0	0	0	0	0	0	2650
18:00	2458	28	8	0	0	0	0	0	0	0	0	0	0	2494
19:00	2146	20	4	0	0	0	0	0	0	0	0	0	0	2170
20:00	1212	15	6	0	0	0	0	0	0	0	0	0	0	1233
21:00	895	10	3	0	0	0	0	0	0	0	0	0	0	908
22:00	932	11	2	0	0	0	0	0	0	0	0	0	0	945
23:00	785	4	7	0	0	0	0	0	0	0	0	0	0	796
Total	30728	918	541	0	0	0	0	0	0	0	0	0	0	32187
Percent	95.5%	2.9%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	09:00											11:00
Vol.	1477	75	48											1596
PM Peak	17:00	12:00	12:00											17:00
Vol.	2611	92	61											2650



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175607 K Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/04/1														
7	349	4	3	0	0	0	0	0	0	0	0	0	0	356
01:00	157	8	2	0	0	0	0	0	0	0	0	0	0	167
02:00	112	8	13	0	0	0	0	0	0	0	0	0	0	133
03:00	87	12	12	0	0	0	0	0	0	0	0	0	0	111
04:00	169	7	24	0	0	0	0	0	0	0	0	0	0	200
05:00	443	24	37	0	0	0	0	0	0	0	0	0	0	504
06:00	868	48	38	0	0	0	0	0	0	0	0	0	0	954
07:00	1457	63	55	0	0	0	0	0	0	0	0	0	0	1575
08:00	1375	64	32	0	0	0	0	0	0	0	0	0	0	1471
09:00	1152	63	40	0	0	0	0	0	0	0	0	0	0	1255
10:00	1308	54	54	0	0	0	0	0	0	0	0	0	0	1416
11:00	1445	62	50	0	0	0	0	0	0	0	0	0	0	1557
12 PM	1736	80	37	0	0	0	0	0	0	0	0	0	0	1853
13:00	1902	68	37	0	0	0	0	0	0	0	0	0	0	2007
14:00	2453	67	30	0	0	0	0	0	0	0	0	0	0	2550
15:00	2482	49	19	0	0	0	0	0	0	0	0	0	0	2550
16:00	2334	39	16	0	0	0	0	0	0	0	0	0	0	2389
17:00	2517	40	6	0	0	0	0	0	0	0	0	0	0	2563
18:00	2601	32	4	0	0	0	0	0	0	0	0	0	0	2637
19:00	2180	30	5	0	0	0	0	0	0	0	0	0	0	2215
20:00	1088	14	3	0	0	0	0	0	0	0	0	0	0	1105
21:00	696	10	5	0	0	0	0	0	0	0	0	0	0	711
22:00	735	5	4	0	0	0	0	0	0	0	0	0	0	744
23:00	790	6	5	0	0	0	0	0	0	0	0	0	0	801
Total	30436	857	531	0	0	0	0	0	0	0	0	0	0	31824
Percent	95.6%	2.7%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	08:00	07:00											07:00
Vol.	1457	64	55											1575
PM Peak	18:00	12:00	12:00											18:00
Vol.	2601	80	37											2637



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/05/17														
7:00	436	5	7	0	0	0	0	0	0	0	0	0	0	448
01:00	222	6	1	0	0	0	0	0	0	0	0	0	0	229
02:00	182	13	3	0	0	0	0	0	0	0	0	0	0	198
03:00	104	6	13	0	0	0	0	0	0	0	0	0	0	123
04:00	178	11	27	0	0	0	0	0	0	0	0	0	0	216
05:00	459	30	31	0	0	0	0	0	0	0	0	0	0	520
06:00	793	49	45	0	0	0	0	0	0	0	0	0	0	887
07:00	1308	64	40	0	0	0	0	0	0	0	0	0	0	1412
08:00	1246	78	39	0	0	0	0	0	0	0	0	0	0	1363
09:00	1119	57	60	0	0	0	0	0	0	0	0	0	0	1236
10:00	1421	67	53	0	0	0	0	0	0	0	0	0	0	1541
11:00	1682	77	46	0	0	0	0	0	0	0	0	0	0	1805
12 PM	2062	63	33	0	0	0	0	0	0	0	0	0	0	2158
13:00	2142	82	42	0	0	0	0	0	0	0	0	0	0	2266
14:00	2205	78	18	0	0	0	0	0	0	0	0	0	0	2301
15:00	2012	58	15	0	0	0	0	0	0	0	0	0	0	2085
16:00	1850	27	6	0	0	0	0	0	0	0	0	0	0	1883
17:00	1949	34	8	0	0	0	0	0	0	0	0	0	0	1991
18:00	2171	22	7	0	0	0	0	0	0	0	0	0	0	2200
19:00	1867	24	7	0	0	0	0	0	0	0	0	0	0	1898
20:00	1290	13	0	0	0	0	0	0	0	0	0	0	0	1303
21:00	1112	13	2	0	0	0	0	0	0	0	0	0	0	1127
22:00	1012	10	6	0	0	0	0	0	0	0	0	0	0	1028
23:00	830	1	1	0	0	0	0	0	0	0	0	0	0	832
Total	29652	888	510	0	0	0	0	0	0	0	0	0	0	31050
Percent	95.5%	2.9%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	09:00											11:00
Vol.	1682	78	60											1805
PM Peak	14:00	13:00	13:00											14:00
Vol.	2205	82	42											2301





Start Time	Cars	Medium Heavy	Large Heavy											Total
05/06/17														
7:00	473	4	3	0	0	0	0	0	0	0	0	0	0	480
01:00	313	5	3	0	0	0	0	0	0	0	0	0	0	321
02:00	299	11	9	0	0	0	0	0	0	0	0	0	0	319
03:00	158	5	3	0	0	0	0	0	0	0	0	0	0	166
04:00	122	5	11	0	0	0	0	0	0	0	0	0	0	138
05:00	244	19	5	0	0	0	0	0	0	0	0	0	0	268
06:00	468	21	14	0	0	0	0	0	0	0	0	0	0	503
07:00	899	32	14	0	0	0	0	0	0	0	0	0	0	945
08:00	1122	26	16	0	0	0	0	0	0	0	0	0	0	1164
09:00	1447	39	14	0	0	0	0	0	0	0	0	0	0	1500
10:00	1664	39	12	0	0	0	0	0	0	0	0	0	0	1715
11:00	1946	32	9	0	0	0	0	0	0	0	0	0	0	1987
12 PM	2099	23	0	0	0	0	0	0	0	0	0	0	0	2122
13:00	2080	33	9	0	0	0	0	0	0	0	0	0	0	2122
14:00	2165	24	3	0	0	0	0	0	0	0	0	0	0	2192
15:00	1995	24	5	0	0	0	0	0	0	0	0	0	0	2024
16:00	2160	14	4	0	0	0	0	0	0	0	0	0	0	2178
17:00	1925	15	3	0	0	0	0	0	0	0	0	0	0	1943
18:00	1663	15	1	0	0	0	0	0	0	0	0	0	0	1679
19:00	1613	14	3	0	0	0	0	0	0	0	0	0	0	1630
20:00	1349	8	3	0	0	0	0	0	0	0	0	0	0	1360
21:00	1200	5	3	0	0	0	0	0	0	0	0	0	0	1208
22:00	1094	6	1	0	0	0	0	0	0	0	0	0	0	1101
23:00	988	3	0	0	0	0	0	0	0	0	0	0	0	991
Total	29486	422	148	0	0	0	0	0	0	0	0	0	0	30056
Percent	98.1%	1.4%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	08:00											11:00
Vol.	1946	39	16											1987
PM Peak	14:00	13:00	13:00											14:00
Vol.	2165	33	9											2192



Start Time	Cars	Medium Heavy	Large Heavy											Total
05/07/17														
7:00	617	6	2	0	0	0	0	0	0	0	0	0	0	625
01:00	393	4	2	0	0	0	0	0	0	0	0	0	0	399
02:00	353	4	0	0	0	0	0	0	0	0	0	0	0	357
03:00	172	4	1	0	0	0	0	0	0	0	0	0	0	177
04:00	121	3	3	0	0	0	0	0	0	0	0	0	0	127
05:00	147	6	3	0	0	0	0	0	0	0	0	0	0	156
06:00	293	11	2	0	0	0	0	0	0	0	0	0	0	306
07:00	671	15	6	0	0	0	0	0	0	0	0	0	0	692
08:00	863	11	2	0	0	0	0	0	0	0	0	0	0	876
09:00	1226	9	3	0	0	0	0	0	0	0	0	0	0	1238
10:00	1701	22	5	0	0	0	0	0	0	0	0	0	0	1728
11:00	1911	9	4	0	0	0	0	0	0	0	0	0	0	1924
12 PM	2167	12	3	0	0	0	0	0	0	0	0	0	0	2182
13:00	2131	9	1	0	0	0	0	0	0	0	0	0	0	2141
14:00	1979	5	3	0	0	0	0	0	0	0	0	0	0	1987
15:00	1995	13	1	0	0	0	0	0	0	0	0	0	0	2009
16:00	1877	12	5	0	0	0	0	0	0	0	0	0	0	1894
17:00	1739	15	2	0	0	0	0	0	0	0	0	0	0	1756
18:00	1538	5	0	0	0	0	0	0	0	0	0	0	0	1543
19:00	1363	13	1	0	0	0	0	0	0	0	0	0	0	1377
20:00	1035	12	4	0	0	0	0	0	0	0	0	0	0	1051
21:00	907	3	6	0	0	0	0	0	0	0	0	0	0	916
22:00	636	2	4	0	0	0	0	0	0	0	0	0	0	642
23:00	473	3	4	0	0	0	0	0	0	0	0	0	0	480
Total	26308	208	67	0	0	0	0	0	0	0	0	0	0	26583
Percent	99.0%	0.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00	07:00											11:00
Vol.	1911	22	6											1924
PM Peak	12:00	17:00	21:00											12:00
Vol.	2167	15	6											2182



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175607 K Class  
Site Code: 13796.00

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/08/1														
7	281	4	2	0	0	0	0	0	0	0	0	0	0	287
01:00	166	2	5	0	0	0	0	0	0	0	0	0	0	173
02:00	133	9	4	0	0	0	0	0	0	0	0	0	0	146
03:00	103	7	7	0	0	0	0	0	0	0	0	0	0	117
04:00	174	7	30	0	0	0	0	0	0	0	0	0	0	211
05:00	427	22	37	0	0	0	0	0	0	0	0	0	0	486
06:00	856	57	38	0	0	0	0	0	0	0	0	0	0	951
07:00	1541	27	29	0	0	0	0	0	0	0	0	0	0	1597
08:00	1310	72	37	0	0	0	0	0	0	0	0	0	0	1419
09:00	1055	65	56	0	0	0	0	0	0	0	0	0	0	1176
10:00	1200	71	49	0	0	0	0	0	0	0	0	0	0	1320
11:00	1439	76	49	0	0	0	0	0	0	0	0	0	0	1564
12 PM	1538	81	49	0	0	0	0	0	0	0	0	0	0	1668
13:00	1889	104	47	0	0	0	0	0	0	0	0	0	0	2040
14:00	2402	68	31	0	0	0	0	0	0	0	0	0	0	2501
15:00	2570	67	9	0	0	0	0	0	0	0	0	0	0	2646
16:00	2632	50	14	0	0	0	0	0	0	0	0	0	0	2696
17:00	2673	38	5	0	0	2673	0	0	0	0	0	0	0	2716
18:00	2492	25	6	0	0	0	0	0	0	0	0	0	0	2523
19:00	1725	23	6	0	0	0	0	0	0	0	0	0	0	1754
20:00	1151	14	5	0	0	0	0	0	0	0	0	0	0	1170
21:00	930	3	4	0	0	0	0	0	0	0	0	0	0	937
22:00	663	9	4	0	0	0	0	0	0	0	0	0	0	676
23:00	557	5	6	0	0	0	0	0	0	0	0	0	0	568
Total	29907	906	529	0	0	0	0	0	0	0	0	0	0	31342
Percent	95.4%	2.9%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	11:00	09:00											07:00
Vol.	1541	76	56											1597
PM Peak	17:00	13:00	12:00											17:00
Vol.	2673	104	49											2716



175607 K Class  
Site Code: 13796.00

Route 1  
between Squire Road (Rt 60) Ramps  
City, State: Revere, MA  
Client: VHB/ A. Berthaume  
NB

Start Time	Cars	Medium Heavy	Large Heavy											Total
05/09/1														
7	299	5	6	0	0	0	0	0	0	0	0	0	0	310
01:00	151	7	8	0	0	0	0	0	0	0	0	0	0	166
02:00	96	7	7	0	0	0	0	0	0	0	0	0	0	110
03:00	69	7	16	0	0	0	0	0	0	0	0	0	0	92
04:00	145	23	23	0	0	0	0	0	0	0	0	0	0	191
05:00	434	18	28	0	0	0	0	0	0	0	0	0	0	480
06:00	840	56	40	0	0	0	0	0	0	0	0	0	0	936
07:00	1497	61	45	0	0	0	0	0	0	0	0	0	0	1603
08:00	1362	49	35	0	0	0	0	0	0	0	0	0	0	1446
09:00	1087	61	37	0	0	0	0	0	0	0	0	0	0	1185
10:00	1230	79	38	0	0	0	0	0	0	0	0	0	0	1347
11:00	1264	82	50	0	0	0	0	0	0	0	0	0	0	1396
12 PM	1561	72	41	0	0	0	0	0	0	0	0	0	0	1674
13:00	1846	95	35	0	0	0	0	0	0	0	0	0	0	1976
14:00	2412	84	34	0	0	0	0	0	0	0	0	0	0	2530
15:00	2671	64	25	0	0	0	0	0	0	0	0	0	0	2760
16:00	2524	37	15	0	0	0	0	0	0	0	0	0	0	2576
17:00	2602	32	6	0	0	0	0	0	0	0	0	0	0	2640
18:00	2640	22	3	0	0	0	0	0	0	0	0	0	0	2665
19:00	2035	23	2	0	0	0	0	0	0	0	0	0	0	2060
20:00	1337	12	4	0	0	0	0	0	0	0	0	0	0	1353
21:00	1056	11	0	0	0	0	0	0	0	0	0	0	0	1067
22:00	736	5	3	0	0	0	0	0	0	0	0	0	0	744
23:00	672	6	7	0	0	0	0	0	0	0	0	0	0	685
Total	30566	918	508	0	0	0	0	0	0	0	0	0	0	31992
Percent	95.5%	2.9%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	11:00	11:00											07:00
Vol.	1497	82	50											1603
PM Peak	15:00	13:00	12:00											15:00
Vol.	2671	95	41											2760



PRECISION  
D A T A  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Route 1  
between Squire Road (Rt 60) Ramps  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 K Volume  
Site Code: 13796.00

Start Time	5/3/2017		5/4/2017		5/5/2017		5/6/2017		5/7/2017		5/8/2017		5/9/2017		Week Average	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	151	393	199	356	208	448	308	480	464	625	156	287	149	310	234	414
01:00	140	199	122	167	153	229	218	321	301	399	167	173	102	166	172	236
02:00	163	144	175	133	165	198	161	319	202	357	132	146	153	110	164	201
03:00	242	96	229	111	236	123	207	166	164	177	233	117	240	92	222	126
04:00	529	191	534	200	488	216	239	138	128	127	573	211	515	191	429	182
05:00	2466	489	2523	504	2300	520	606	268	279	156	2485	486	2510	480	1881	415
06:00	3449	995	3637	954	3601	887	1078	503	666	306	3669	951	3685	936	2826	790
07:00	3379	1527	3529	1575	3047	1412	1242	945	776	692	3502	1597	3598	1603	2725	1336
08:00	3122	1432	3159	1471	2879	1363	1428	1164	1019	876	3077	1419	2877	1446	2509	1310
09:00	2764	1216	2859	1255	2415	1236	1720	1500	1367	1238	2559	1176	2686	1185	2339	1258
10:00	2143	1276	2113	1416	1964	1541	1889	1715	1728	1728	1936	1320	2049	1347	1975	1478
11:00	1631	1596	1742	1557	1789	1805	2132	1987	1997	1924	1759	1564	1760	1396	1830	1690
12:00 PM	1693	1887	1683	1853	1726	2158	2199	2122	2232	2182	1662	1668	1647	1674	1835	1935
01:00	1671	2080	1651	2007	1771	2266	2133	2122	2357	2141	1603	2040	1591	1976	1825	2090
02:00	1722	2504	1785	2550	1826	2301	2417	2192	2419	1987	1699	2501	1701	2530	1938	2366
03:00	1702	2406	1795	2550	1719	2085	2231	2024	2275	2009	1700	2646	1664	2760	1869	2354
04:00	1795	2560	1810	2389	1714	1883	2255	2178	2354	1894	1568	2696	1677	2576	1882	2311
05:00	1861	2650	1974	2563	1622	1991	2083	1943	2290	1756	1715	2716	1789	2640	1905	2323
06:00	1630	2494	1733	2637	1455	2200	1987	1679	1990	1543	1539	2523	1590	2665	1703	2249
07:00	1209	2170	1281	2215	1168	1898	1623	1630	1440	1377	1182	1754	1214	2060	1302	1872
08:00	1084	1233	1103	1105	973	1303	1337	1360	1175	1051	949	1170	997	1353	1088	1225
09:00	790	908	746	711	935	1127	1225	1208	873	916	776	937	784	1067	876	982
10:00	607	945	646	744	747	1028	937	1101	608	642	513	676	560	744	660	840
11:00	343	796	395	801	532	832	669	991	327	480	280	568	323	685	410	736
Total Day	36286	32187	37423	31824	35433	31050	32324	30056	29431	26583	35434	31342	35861	31992	34599	30719
	68473		69247		66483		62380		56014		66776		67853		65318	
AM Peak	06:00	11:00	06:00	07:00	06:00	11:00	11:00	11:00	11:00	11:00	06:00	07:00	06:00	07:00	06:00	11:00
Vol.	3449	1596	3637	1575	3601	1805	2132	1987	1997	1924	3669	1597	3685	1603	2826	1690
PM Peak	17:00	17:00	17:00	18:00	14:00	14:00	14:00	14:00	14:00	12:00	17:00	17:00	17:00	15:00	14:00	14:00
Vol.	1861	2650	1974	2637	1826	2301	2417	2192	2419	2182	1715	2716	1789	2760	1938	2366

Comb. Total	68473	69247	66483	62380	56014	66776	67853	65318
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ADT	ADT 65,318	AADT 65,318
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PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Route 1  
between Squire Road (Rt 60) Ramps  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 K Volume  
Site Code: 13796.00

Start Time	SB		NB		Combin ed		5/3/2017 Wed	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
12:00	52	407	136	408	188	815		
12:15	33	428	114	473	147	901		
12:30	37	445	79	501	116	946		
12:45	29	151 413	1693 64	393 505	1887 93	544 918	3580	
01:00	33	381	57	453	90	834		
01:15	35	443	49	499	84	942		
01:30	29	423	48	574	77	997		
01:45	43	140 424	1671 45	199 554	2080 88	339 978	3751	
02:00	27	428	33	608	60	1036		
02:15	49	453	50	687	99	1140		
02:30	45	443	37	642	82	1085		
02:45	42	163 398	1722 24	144 567	2504 66	307 965	4226	
03:00	40	449	24	597	64	1046		
03:15	64	434	15	579	79	1013		
03:30	71	418	23	633	94	1051		
03:45	67	242 401	1702 34	96 597	2406 101	338 998	4108	
04:00	69	446	37	639	106	1085		
04:15	123	463	38	636	161	1099		
04:30	148	447	58	667	206	1114		
04:45	189	529 439	1795 58	191 618	2560 247	720 1057	4355	
05:00	315	463	75	653	390	1116		
05:15	493	492	105	670	598	1162		
05:30	765	463	153	661	918	1124		
05:45	893	2466 443	1861 156	489 666	2650 1049	2955 1109	4511	
06:00	869	476	166	619	1035	1095		
06:15	864	417	234	628	1098	1045		
06:30	855	395	299	641	1154	1036		
06:45	861	3449 342	1630 296	995 606	2494 1157	4444 948	4124	
07:00	863	283	327	585	1190	868		
07:15	811	300	388	590	1199	890		
07:30	865	332	435	507	1300	839		
07:45	840	3379 294	1209 377	1527 488	2170 1217	4906 782	3379	
08:00	774	294	394	443	1168	737		
08:15	795	260	381	370	1176	630		
08:30	766	293	326	194	1092	487		
08:45	787	3122 237	1084 331	1432 226	1233 1118	4554 463	2317	
09:00	767	222	322	215	1089	437		
09:15	698	192	288	230	986	422		
09:30	670	201	290	221	960	422		
09:45	629	2764 175	790 316	1216 242	908 945	3980 417	1698	
10:00	603	172	301	242	904	414		
10:15	531	167	313	241	844	408		
10:30	538	146	310	209	848	355		
10:45	471	2143 122	607 352	1276 253	945 823	3419 375	1552	
11:00	412	105	356	253	768	358		
11:15	441	87	404	216	845	303		
11:30	383	89	445	182	828	271		
11:45	395	1631 62	343 391	1596 145	796 786	3227 207	1139	
Total	20179	16107	9554	22633	29733	38740		
Percent	67.9%	41.6%	32.1%	58.4%				
Day Total		36286		32187		68473		
Peak	05:45	-	05:15	-	11:00	-	05:00	-
Vol.	3481	-	1874	-	1596	-	2650	-
P.H.F.	0.975	-	0.952	-	0.897	-	0.989	-



PRECISION  
D A T A  
INDUSTRIES, LLC

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Route 1  
between Squire Road (Rt 60) Ramps  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 K Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/4/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Thu	
12:00	51	432	121	440	172	872		
12:15	62	438	53	455	115	893		
12:30	50	426	112	449	162	875		
12:45	36	199 387	70 1683	356 509	1853 106	555 896	3536	
01:00	29	408	43	488	72	896		
01:15	25	429	41	463	66	892		
01:30	36	399	41	503	77	902		
01:45	32	122 415	42 1651	167 553	2007 74	289 968	3658	
02:00	40	425	33	639	73	1064		
02:15	43	474	32	658	75	1132		
02:30	45	457	35	621	80	1078		
02:45	47	175 429	33 1785	133 632	2550 80	308 1061	4335	
03:00	44	410	24	623	68	1033		
03:15	63	457	18	636	81	1093		
03:30	56	463	42	623	98	1086		
03:45	66	229 465	27 1795	111 668	2550 93	340 1133	4345	
04:00	73	409	31	616	104	1025		
04:15	123	464	40	562	163	1026		
04:30	145	490	48	576	193	1066		
04:45	193	534 447	81 1810	200 635	2389 274	734 1082	4199	
05:00	312	488	74	608	386	1096		
05:15	530	488	120	669	650	1157		
05:30	814	506	128	617	942	1123		
05:45	867	2523 492	182 1974	504 669	2563 1049	3027 1161	4537	
06:00	912	488	165	650	1077	1138		
06:15	913	470	221	663	1134	1133		
06:30	886	401	281	669	1167	1070		
06:45	926	3637 374	1733 287	954 655	2637 1213	4591 1029	4370	
07:00	889	318	351	607	1240	925		
07:15	866	347	360	566	1226	913		
07:30	881	313	435	532	1316	845		
07:45	893	3529 303	1281 429	1575 510	2215 1322	5104 813	3496	
08:00	836	341	416	478	1252	819		
08:15	789	255	375	240	1164	495		
08:30	786	276	364	198	1150	474		
08:45	748	3159 231	1103 316	1471 189	1105 1064	4630 420	2208	
09:00	718	194	304	185	1022	379		
09:15	767	203	354	154	1121	357		
09:30	707	164	316	174	1023	338		
09:45	667	2859 185	746 281	1255 198	711 948	4114 383	1457	
10:00	606	176	346	159	952	335		
10:15	540	168	321	211	861	379		
10:30	503	169	384	171	887	340		
10:45	464	2113 133	646 365	1416 203	744 829	3529 336	1390	
11:00	416	111	324	242	740	353		
11:15	464	113	415	209	879	322		
11:30	439	95	398	191	837	286		
11:45	423	1742 76	395 420	1557 159	801 843	3299 235	1196	
Total	20821	16602	9699	22125	30520	38727		
Percent	68.2%	42.9%	31.8%	57.1%				
Day Total		37423		31824		69247		
Peak	06:00	-	05:00	-	07:30	-	05:15	-
Vol.	3637	-	1974	-	1655	-	4579	-
P.H.F.	0.982	-	0.975	-	0.951	-	0.986	-



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Route 1  
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City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 K Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/5/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	59	427	140	547	199	974		
12:15	62	477	115	542	177	1019		
12:30	41	385	96	551	137	936		
12:45	46	437	97	518	143	955	3884	
01:00	34	436	57	553	91	989		
01:15	46	432	65	527	111	959		
01:30	38	465	57	551	95	1016		
01:45	35	438	50	635	85	1073	4037	
02:00	39	460	50	528	89	988		
02:15	39	454	46	624	85	1078		
02:30	37	455	53	598	90	1053		
02:45	50	457	49	551	99	1008	4127	
03:00	47	465	37	578	84	1043		
03:15	62	415	30	495	92	910		
03:30	64	404	23	484	87	888		
03:45	63	435	33	528	96	963	3804	
04:00	70	449	44	543	114	992		
04:15	110	394	43	405	153	799		
04:30	132	454	45	493	177	947		
04:45	176	417	84	442	260	859	3597	
05:00	284	440	70	476	354	916		
05:15	447	400	109	481	556	881		
05:30	717	427	177	509	894	936		
05:45	852	355	164	525	1016	880	3613	
06:00	928	320	150	540	1078	860		
06:15	881	315	218	564	1099	879		
06:30	892	361	261	527	1153	888		
06:45	900	459	258	569	1158	1028	3655	
07:00	786	335	289	534	1075	869		
07:15	734	304	340	496	1074	800		
07:30	757	281	392	426	1149	707		
07:45	770	248	391	442	1161	690	3066	
08:00	805	265	361	378	1166	643		
08:15	757	265	386	348	1143	613		
08:30	626	226	308	304	934	530		
08:45	691	217	308	273	999	490	2276	
09:00	649	263	309	286	958	549		
09:15	610	244	289	288	899	532		
09:30	606	231	316	267	922	498		
09:45	550	197	322	286	872	483	2062	
10:00	515	177	375	274	890	451		
10:15	505	220	398	250	903	470		
10:30	488	189	366	265	854	454		
10:45	456	161	402	239	858	400	1775	
11:00	412	161	457	219	869	380		
11:15	471	133	451	232	922	365		
11:30	468	116	463	206	931	322		
11:45	438	122	434	175	872	297	1364	
Total	19245	16188	9978	21072	29223	37260		
Percent	65.9%	43.4%	34.1%	56.6%				
Day Total	35433		31050		66483			
Peak	06:00	-	02:15	-	11:00	-	01:45	-
Vol.	3601	-	1831	-	1805	-	2385	-
P.H.F.	0.970	-	0.984	-	0.975	-	0.939	-





PRECISION  
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Route 1  
between Squire Road (Rt 60) Ramps  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 K Volume  
Site Code: 13796.00

Start	SB		NB		Combin		5/6/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sat	
12:00	86	527	129	525	215	1052		
12:15	87	548	131	539	218	1087		
12:30	75	579	104	540	179	1119		
12:45	60	545	116	518	176	1063	4321	
01:00	64	489	86	553	150	1042		
01:15	55	533	89	523	144	1056		
01:30	47	559	75	550	122	1109		
01:45	52	552	71	496	123	1048	4255	
02:00	44	596	78	545	122	1141		
02:15	39	606	91	546	130	1152		
02:30	37	639	81	524	118	1163		
02:45	41	576	69	577	110	1153	4609	
03:00	41	508	48	518	89	1026		
03:15	60	586	45	493	105	1079		
03:30	61	572	43	521	104	1093		
03:45	45	565	30	492	75	1057	4255	
04:00	44	523	34	543	78	1066		
04:15	45	582	30	541	75	1123		
04:30	72	576	42	543	114	1119		
04:45	78	574	32	551	110	1125	4433	
05:00	89	505	37	504	126	1009		
05:15	146	546	69	503	215	1049		
05:30	174	523	74	474	248	997		
05:45	197	509	88	462	285	971	4026	
06:00	221	528	89	426	310	954		
06:15	284	507	96	403	380	910		
06:30	300	494	154	445	454	939		
06:45	273	458	164	405	437	863	3666	
07:00	252	416	185	427	437	843		
07:15	325	403	243	400	568	803		
07:30	319	418	259	410	578	828		
07:45	346	386	258	393	604	779	3253	
08:00	324	365	255	346	579	711		
08:15	338	349	286	344	624	693		
08:30	403	333	307	309	710	642		
08:45	363	290	316	361	679	651	2697	
09:00	379	351	335	288	714	639		
09:15	456	292	368	308	824	600		
09:30	464	301	397	309	861	610		
09:45	421	281	400	303	821	584	2433	
10:00	442	248	368	302	810	550		
10:15	454	228	421	313	875	541		
10:30	511	239	439	246	950	485		
10:45	482	222	487	240	969	462	2038	
11:00	485	197	463	269	948	466		
11:15	545	193	489	257	1034	450		
11:30	546	155	506	257	1052	412		
11:45	556	124	529	208	1085	332	1660	
Total	11228	21096	9506	20550	20734	41646		
Percent	54.2%	50.7%	45.8%	49.3%				
Day Total	32324		30056		62380			
Peak	11:00	-	02:00	-	11:00	-	02:00	-
Vol.	2132	-	2417	-	4119	-	4609	-
P.H.F.	0.959	-	0.946	-	0.949	-	0.991	-



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Route 1  
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City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 K Volume  
Site Code: 13796.00

Start		SB		NB		Combin ed		5/7/2017	
Time	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	Sun	
12:00	140	543		165	536	305	1079		
12:15	111	532		169	560	280	1092		
12:30	112	562		155	569	267	1131		
12:45	101	464 595	2232	136	625 517	2182	237	1089	1112 4414
01:00	93	618		100	565		193		1183
01:15	78	585		94	514		172		1099
01:30	78	599		105	512		183		1111
01:45	52	301 555	2357	100	399 550	2141	152	700	1105 4498
02:00	57	577		87	494		144		1071
02:15	57	681		90	481		147		1162
02:30	44	613		99	492		143		1105
02:45	44	202 548	2419	81	357 520	1987	125	559	1068 4406
03:00	36	535		49	511		85		1046
03:15	49	539		52	492		101		1031
03:30	32	596		41	533		73		1129
03:45	47	164 605	2275	35	177 473	2009	82	341	1078 4284
04:00	33	537		38	490		71		1027
04:15	22	606		29	479		51		1085
04:30	38	650		33	482		71		1132
04:45	35	128 561	2354	27	127 443	1894	62	255	1004 4248
05:00	50	571		33	432		83		1003
05:15	57	591		34	476		91		1067
05:30	76	569		44	452		120		1021
05:45	96	279 559	2290	45	156 396	1756	141	435	955 4046
06:00	144	559		59	412		203		971
06:15	169	550		73	392		242		942
06:30	189	463		77	376		266		839
06:45	164	666 418	1990	97	306 363	1543	261	972	781 3533
07:00	147	387		126	358		273		745
07:15	176	388		167	308		343		696
07:30	234	317		194	381		428		698
07:45	219	776 348	1440	205	692 330	1377	424	1468	678 2817
08:00	210	328		193	291		403		619
08:15	234	315		219	236		453		551
08:30	264	267		191	260		455		527
08:45	311	1019 265	1175	273	876 264	1051	584	1895	529 2226
09:00	287	253		284	239		571		492
09:15	318	239		281	259		599		498
09:30	378	194		326	212		704		406
09:45	384	1367 187	873	347	1238 206	916	731	2605	393 1789
10:00	385	184		391	181		776		365
10:15	440	162		432	161		872		323
10:30	444	145		437	153		881		298
10:45	459	1728 117	608	468	1728 147	642	927	3456	264 1250
11:00	485	98		486	125		971		223
11:15	537	92		486	113		1023		205
11:30	510	78		472	115		982		193
11:45	465	1997 59	327	480	1924 127	480	945	3921	186 807
Total	9091	20340		8605	17978		17696		38318
Percent	51.4%	53.1%		48.6%	46.9%				
Day Total		29431		26583			56014		
Peak	11:00	- 01:45	-	11:00	- 00:15	-	11:00	- 00:30	- - -
Vol.	1997	- 2426	-	1924	- 2211	-	3921	- 4525	- - -
P.H.F.	0.930	0.891		0.990	0.971		0.958	0.956	



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City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 K Volume  
Site Code: 13796.00

Start	SB			NB			Combin ed		5/8/2017					
Time	A.M.		P.M.	A.M.		P.M.	A.M.		P.M.	Mon				
12:00	42		413	99		411	141		824					
12:15	48		402	65		414	113		816					
12:30	34		408	61		464	95		872					
12:45	32	156	439	1662	62	287	379	1668	94	443	818	3330		
01:00	38		383		48		448		86		831			
01:15	38		425		48		499		86		924			
01:30	44		380		42		496		86		876			
01:45	47	167	415	1603	35	173	597	2040	82	340	1012	3643		
02:00	25		460		53		586		78		1046			
02:15	34		427		33		610		67		1037			
02:30	35		412		37		690		72		1102			
02:45	38	132	400	1699	23	146	615	2501	61	278	1015	4200		
03:00	37		435		34		674		71		1109			
03:15	54		390		29		675		83		1065			
03:30	73		426		28		651		101		1077			
03:45	69	233	449	1700	26	117	646	2646	95	350	1095	4346		
04:00	88		385		26		653		114		1038			
04:15	106		397		41		680		147		1077			
04:30	179		411		66		690		245		1101			
04:45	200	573	375	1568	78	211	673	2696	278	784	1048	4264		
05:00	303		411		93		675		396		1086			
05:15	516		461		115		677		631		1138			
05:30	761		448		153		692		914		1140			
05:45	905	2485	395	1715	125	486	672	2716	1030	2971	1067	4431		
06:00	924		398		178		620		1102		1018			
06:15	964		402		205		613		1169		1015			
06:30	919		376		300		682		1219		1058			
06:45	862	3669	363	1539	268	951	608	2523	1130	4620	971	4062		
07:00	882		306		326		427		1208		733			
07:15	894		317		385		460		1279		777			
07:30	883		287		447		447		1330		734			
07:45	843	3502	272	1182	439	1597	420	1754	1282	5099	692	2936		
08:00	825		251		377		356		1202		607			
08:15	792		249		392		303		1184		552			
08:30	738		204		349		231		1087		435			
08:45	722	3077	245	949	301	1419	280	1170	1023	4496	525	2119		
09:00	675		250		289		261		964		511			
09:15	649		201		293		259		942		460			
09:30	634		162		302		229		936		391			
09:45	601	2559	163	776	292	1176	188	937	893	3735	351	1713		
10:00	535		149		289		174		824		323			
10:15	518		125		325		176		843		301			
10:30	446		127		352		160		798		287			
10:45	437	1936	112	513	354	1320	166	676	791	3256	278	1189		
11:00	429		89		353		139		782		228			
11:15	486		75		384		156		870		231			
11:30	431		68		383		152		814		220			
11:45	413	1759	48	280	444	1564	121	568	857	3323	169	848		
Total	20248		15186		9447		21895		29695		37081			
Percent	68.2%		41.0%		31.8%		59.0%							
Day Total			35434				31342				66776			
Peak	05:45	-	05:00	-	07:30	-	04:15	-	07:00	-	05:00	-	-	-
Vol.	3712	-	1715	-	1655	-	2718	-	5099	-	4431	-	-	-
P.H.F.	0.963		0.930		0.926		0.985		0.958		0.972			



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Route 1  
between Squire Road (Rt 60) Ramps  
City, State: Revere, MA  
Client: VHB/ A. Berthume

175607 K Volume  
Site Code: 13796.00

Start	SB		NB		Combin		ed		5/9/2017	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Tue	
12:00	46	412	100	346	146	758				
12:15	48	418	80	456	128	874				
12:30	32	405	78	429	110	834				
12:45	23	149 412	1647 52	310 443	1674 75	459 855	3321			
01:00	29	413	41	445	70	858				
01:15	19	403	48	450	67	853				
01:30	29	381	36	513	65	894				
01:45	25	102 394	1591 41	166 568	1976 66	268 962	3567			
02:00	28	419	28	630	56	1049				
02:15	36	450	29	647	65	1097				
02:30	43	423	28	620	71	1043				
02:45	46	153 409	1701 25	110 633	2530 71	263 1042	4231			
03:00	46	400	21	747	67	1147				
03:15	59	393	22	658	81	1051				
03:30	59	453	20	661	79	1114				
03:45	76	240 418	1664 29	92 694	2760 105	332 1112	4424			
04:00	60	428	36	657	96	1085				
04:15	128	408	30	665	158	1073				
04:30	122	448	60	636	182	1084				
04:45	205	515 393	1677 65	191 618	2576 270	706 1011	4253			
05:00	311	424	94	661	405	1085				
05:15	530	434	111	689	641	1123				
05:30	766	462	138	631	904	1093				
05:45	903	2510 469	1789 137	480 659	2640 1040	2990 1128	4429			
06:00	926	443	156	676	1082	1119				
06:15	908	452	214	667	1122	1119				
06:30	935	388	297	664	1232	1052				
06:45	916	3685 307	1590 269	936 658	2665 1185	4621 965	4255			
07:00	944	327	370	589	1314	916				
07:15	863	321	385	530	1248	851				
07:30	914	306	441	518	1355	824				
07:45	877	3598 260	1214 407	1603 423	2060 1284	5201 683	3274			
08:00	766	255	342	415	1108	670				
08:15	730	251	383	319	1113	570				
08:30	692	249	360	276	1052	525				
08:45	689	2877 242	997 361	1446 343	1353 1050	4323 585	2350			
09:00	691	243	316	293	1007	536				
09:15	688	211	283	279	971	490				
09:30	674	180	293	276	967	456				
09:45	633	2686 150	784 293	1185 219	1067 926	3871 369	1851			
10:00	568	147	313	217	881	364				
10:15	549	163	313	183	862	346				
10:30	500	138	360	188	860	326				
10:45	432	2049 112	560 361	1347 156	744 793	3396 268	1304			
11:00	428	99	331	205	759	304				
11:15	441	90	362	194	803	284				
11:30	480	84	350	164	830	248				
11:45	411	1760 50	323 353	1396 122	685 764	3156 172	1008			
Total	20324	15537	9262	22730	29586	38267				
Percent	68.7%	40.6%	31.3%	59.4%						
Day Total		35861		31992		67853				
Peak	06:15	-	05:30	-	07:00	-	05:15	-	-	-
Vol.	3703	-	1826	-	1603	-	4463	-	-	-
P.H.F.	0.981	-	0.973	-	0.909	-	0.924	-	-	-

PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	6	504	12	3	525	17	7	115	0	139	23	210	17	7	257	19	6	10	0	35	956
6:45 AM	6	506	11	0	523	37	16	136	0	189	18	231	25	17	291	33	2	7	0	42	1045
Total	12	1010	23	3	1048	54	23	251	0	328	41	441	42	24	548	52	8	17	0	77	2001
7:00 AM	7	510	9	0	526	22	16	106	0	144	30	256	31	13	330	25	2	10	0	37	1037
7:15 AM	3	506	14	3	526	25	15	111	0	151	25	256	24	16	321	33	4	9	0	46	1044
7:30 AM	10	487	13	1	511	20	12	100	0	132	27	238	22	15	302	33	3	11	0	47	992
7:45 AM	5	466	17	0	488	26	20	119	0	165	33	212	19	10	274	26	2	11	0	39	966
Total	25	1969	53	4	2051	93	63	436	0	592	115	962	96	54	1227	117	11	41	0	169	4039
8:00 AM	12	496	23	4	535	31	13	87	0	131	33	269	18	6	326	25	4	11	0	40	1032
8:15 AM	13	498	19	1	531	35	14	75	0	124	16	265	22	8	311	33	4	3	0	40	1006
8:30 AM	9	476	6	1	492	25	12	86	0	123	22	231	28	11	292	26	10	12	0	48	955
8:45 AM	3	454	23	1	481	39	11	74	0	124	13	227	32	14	286	21	2	6	0	29	920
Total	37	1924	71	7	2039	130	50	322	0	502	84	992	100	39	1215	105	20	32	0	157	3913
9:00 AM	11	432	18	0	461	31	4	50	0	85	26	266	22	9	323	40	2	6	0	48	917
9:15 AM	9	409	23	1	442	34	9	62	0	105	19	256	23	5	303	26	3	8	0	37	887
Total	20	841	41	1	903	65	13	112	0	190	45	522	45	14	626	66	5	14	0	85	1804
Grand Total	94	5744	188	15	6041	342	149	1121	0	1612	285	2917	283	131	3616	340	44	104	0	488	11757
Approach %	1.6	95.1	3.1	0.2		21.2	9.2	69.5	0.0		7.9	80.7	7.8	3.6		69.7	9.0	21.3	0.0		
Total %	0.8	48.9	1.6	0.1	51.4	2.9	1.3	9.5	0.0	13.7	2.4	24.8	2.4	1.1	30.8	2.9	0.4	0.9	0.0	4.2	
Exiting Leg Total	3378					517					7336					526					11757
Cars	85	5454	166	15	5720	313	147	1065	0	1525	262	2646	213	129	3250	309	41	93	0	443	10938
% Cars	90.4	95.0	88.3	100.0	94.7	91.5	98.7	95.0	0.0	94.6	91.9	90.7	75.3	98.5	89.9	90.9	93.2	89.4	0.0	90.8	93.0
Exiting Leg Total	3067					469					6957					445					10938
Heavy Vehicles	8	210	20	0	238	12	2	23	0	37	13	168	47	2	230	30	3	10	0	43	548
% Heavy Vehicles	8.5	3.7	10.6	0.0	3.9	3.5	1.3	2.1	0.0	2.3	4.6	5.8	16.6	1.5	6.4	8.8	6.8	9.6	0.0	8.8	4.7
Exiting Leg Total	190					36					265					57					548
Buses	1	80	2	0	83	17	0	33	0	50	10	103	23	0	136	1	0	1	0	2	271
% Buses	1.1	1.4	1.1	0.0	1.4	5.0	0.0	2.9	0.0	3.1	3.5	3.5	8.1	0.0	3.8	0.3	0.0	1.0	0.0	0.4	2.3
Exiting Leg Total	121					12					114					24					271

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:45 AM	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:45 AM	6	506	11	0	523	37	16	136	0	189	18	231	25	17	291	33	2	7	0	42	1045
7:00 AM	7	510	9	0	526	22	16	106	0	144	30	256	31	13	330	25	2	10	0	37	1037
7:15 AM	3	506	14	3	526	25	15	111	0	151	25	256	24	16	321	33	4	9	0	46	1044
7:30 AM	10	487	13	1	511	20	12	100	0	132	27	238	22	15	302	33	3	11	0	47	992
Total Volume	26	2009	47	4	2086	104	59	453	0	616	100	981	102	61	1244	124	11	37	0	172	4118
% Approach Total	1.2	96.3	2.3	0.2		16.9	9.6	73.5	0.0		8.0	78.9	8.2	4.9		72.1	6.4	21.5	0.0		
PHF	0.650	0.985	0.839	0.333	0.991	0.703	0.922	0.833	0.000	0.815	0.833	0.958	0.823	0.897	0.942	0.939	0.688	0.841	0.000	0.915	0.985
Cars	24	1919	38	4	1985	98	58	437	0	593	90	890	74	61	1115	111	10	32	0	153	3846
Cars %	92.3	95.5	80.9	100.0	95.2	94.2	98.3	96.5	0.0	96.3	90.0	90.7	72.5	100.0	89.6	89.5	90.9	86.5	0.0	89.0	93.4
Heavy Vehicles	2	70	9	0	81	3	1	6	0	10	6	58	19	0	83	13	1	5	0	19	193
Heavy Vehicles %	7.7	3.5	19.1	0.0	3.9	2.9	1.7	1.3	0.0	1.6	6.0	5.9	18.6	0.0	6.7	10.5	9.1	13.5	0.0	11.0	4.7
Buses	0	20	0	0	20	3	0	10	0	13	4	33	9	0	46	0	0	0	0	0	79
Buses %	0.0	1.0	0.0	0.0	1.0	2.9	0.0	2.2	0.0	2.1	4.0	3.4	8.8	0.0	3.7	0.0	0.0	0.0	0.0	0.0	1.9
Cars Enter Leg	24	1919	38	4	1985	98	58	437	0	593	90	890	74	61	1115	111	10	32	0	153	3846
Heavy Enter Leg	2	70	9	0	81	3	1	6	0	10	6	58	19	0	83	13	1	5	0	19	193
Bus Enter Leg	0	20	0	0	20	3	0	10	0	13	4	33	9	0	46	0	0	0	0	0	79
Total Entering Leg	26	2009	47	4	2086	104	59	453	0	616	100	981	102	61	1244	124	11	37	0	172	4118
Cars Exiting Leg	1024					138					2528					156					3846

PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



**Cars, Heavy Vehicles, and Buses (Combined)**

	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
Heavy Exiting Leg	66					16					89					22					193
Buses Exiting Leg	36					4					30					9					79
Total Exiting Leg	1126					158					2647					187					4118

PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars

	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	6	476	11	3	496	15	7	111	0	133	22	190	12	7	231	17	6	10	0	33	893
6:45 AM	6	485	9	0	500	36	15	134	0	185	16	219	19	17	271	30	2	6	0	38	994
Total	12	961	20	3	996	51	22	245	0	318	38	409	31	24	502	47	8	16	0	71	1887
7:00 AM	7	484	7	0	498	18	16	102	0	136	28	232	21	13	294	22	1	8	0	31	959
7:15 AM	2	488	11	3	504	24	15	108	0	147	24	223	19	16	282	30	4	9	0	43	976
7:30 AM	9	462	11	1	483	20	12	93	0	125	22	216	15	15	268	29	3	9	0	41	917
7:45 AM	4	441	16	0	461	24	20	114	0	158	32	198	15	9	254	23	2	10	0	35	908
Total	22	1875	45	4	1946	86	63	417	0	566	106	869	70	53	1098	104	10	36	0	150	3760
8:00 AM	11	478	20	4	513	29	13	84	0	126	31	244	16	6	297	24	4	9	0	37	973
8:15 AM	12	480	17	1	510	32	14	73	0	119	14	239	13	8	274	31	4	3	0	38	941
8:30 AM	8	450	4	1	463	22	12	79	0	113	22	213	25	11	271	25	10	12	0	47	894
8:45 AM	2	435	22	1	460	35	10	68	0	113	12	201	23	13	249	20	2	5	0	27	849
Total	33	1843	63	7	1946	118	49	304	0	471	79	897	77	38	1091	100	20	29	0	149	3657
9:00 AM	10	408	15	0	433	27	4	45	0	76	23	241	17	9	290	36	1	5	0	42	841
9:15 AM	8	367	23	1	399	31	9	54	0	94	16	230	18	5	269	22	2	7	0	31	793
Total	18	775	38	1	832	58	13	99	0	170	39	471	35	14	559	58	3	12	0	73	1634
Grand Total	85	5454	166	15	5720	313	147	1065	0	1525	262	2646	213	129	3250	309	41	93	0	443	10938
Approach %	1.5	95.3	2.9	0.3		20.5	9.6	69.8	0.0		8.1	81.4	6.6	4.0		69.8	9.3	21.0	0.0		
Total %	0.8	49.9	1.5	0.1	52.3	2.9	1.3	9.7	0.0	13.9	2.4	24.2	1.9	1.2	29.7	2.8	0.4	0.9	0.0	4.1	
Exiting Leg Total	3067					469					6957					445					10938

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:45 AM	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:45 AM	6	485	9	0	500	36	15	134	0	185	16	219	19	17	271	30	2	6	0	38	994
7:00 AM	7	484	7	0	498	18	16	102	0	136	28	232	21	13	294	22	1	8	0	31	959
7:15 AM	2	488	11	3	504	24	15	108	0	147	24	223	19	16	282	30	4	9	0	43	976
7:30 AM	9	462	11	1	483	20	12	93	0	125	22	216	15	15	268	29	3	9	0	41	917
Total Volume	24	1919	38	4	1985	98	58	437	0	593	90	890	74	61	1115	111	10	32	0	153	3846
% Approach Total	1.2	96.7	1.9	0.2		16.5	9.8	73.7	0.0		8.1	79.8	6.6	5.5		72.5	6.5	20.9	0.0		
PHF	0.667	0.983	0.864	0.333	0.985	0.681	0.906	0.815	0.000	0.801	0.804	0.959	0.881	0.897	0.948	0.925	0.625	0.889	0.000	0.890	0.967
Entering Leg	24	1919	38	4	1985	98	58	437	0	593	90	890	74	61	1115	111	10	32	0	153	3846
Exiting Leg	1024					138					2528					156					3846
Total	3009					731					3643					309					7692

PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	25	1	0	26	1	0	1	0	2	0	11	4	0	15	2	0	0	0	2	45
6:45 AM	0	17	2	0	19	0	1	0	0	1	1	7	4	0	12	3	0	1	0	4	36
Total	0	42	3	0	45	1	1	1	0	3	1	18	8	0	27	5	0	1	0	6	81
7:00 AM	0	20	2	0	22	3	0	1	0	4	1	18	7	0	26	3	1	2	0	6	58
7:15 AM	1	12	3	0	16	0	0	2	0	2	0	18	2	0	20	3	0	0	0	3	41
7:30 AM	1	21	2	0	24	0	0	3	0	3	4	15	6	0	25	4	0	2	0	6	58
7:45 AM	1	17	1	0	19	0	0	1	0	1	0	7	2	1	10	2	0	0	0	2	32
Total	3	70	8	0	81	3	0	7	0	10	5	58	17	1	81	12	1	4	0	17	189
8:00 AM	1	11	1	0	13	1	0	1	0	2	1	15	2	0	18	1	0	2	0	3	36
8:15 AM	1	12	2	0	15	1	0	0	0	1	2	12	5	0	19	2	0	0	0	2	37
8:30 AM	0	17	2	0	19	1	0	5	0	6	0	15	3	0	18	1	0	0	0	1	44
8:45 AM	1	11	1	0	13	1	1	3	0	5	0	17	7	1	25	1	0	1	0	2	45
Total	3	51	6	0	60	4	1	9	0	14	3	59	17	1	80	5	0	3	0	8	162
9:00 AM	1	19	3	0	23	2	0	2	0	4	1	14	3	0	18	4	1	1	0	6	51
9:15 AM	1	28	0	0	29	2	0	4	0	6	3	19	2	0	24	4	1	1	0	6	65
Total	2	47	3	0	52	4	0	6	0	10	4	33	5	0	42	8	2	2	0	12	116
Grand Total	8	210	20	0	238	12	2	23	0	37	13	168	47	2	230	30	3	10	0	43	548
Approach %	3.4	88.2	8.4	0.0		32.4	5.4	62.2	0.0		5.7	73.0	20.4	0.9		69.8	7.0	23.3	0.0		
Total %	1.5	38.3	3.6	0.0	43.4	2.2	0.4	4.2	0.0	6.8	2.4	30.7	8.6	0.4	42.0	5.5	0.5	1.8	0.0	7.8	
Exiting Leg Total	190					36					265					57					548

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:30 AM	0	17	2	0	19	1	0	5	0	6	0	15	3	0	18	1	0	0	0	1	44
8:45 AM	1	11	1	0	13	1	1	3	0	5	0	17	7	1	25	1	0	1	0	2	45
9:00 AM	1	19	3	0	23	2	0	2	0	4	1	14	3	0	18	4	1	1	0	6	51
9:15 AM	1	28	0	0	29	2	0	4	0	6	3	19	2	0	24	4	1	1	0	6	65
Total Volume	3	75	6	0	84	6	1	14	0	21	4	65	15	1	85	10	2	3	0	15	205
% Approach Total	3.6	89.3	7.1	0.0		28.6	4.8	66.7	0.0		4.7	76.5	17.6	1.2		66.7	13.3	20.0	0.0		
PHF	0.750	0.670	0.500	0.000	0.724	0.750	0.250	0.700	0.000	0.875	0.333	0.855	0.536	0.250	0.850	0.625	0.500	0.750	0.000	0.625	0.788
Entering Leg	3	75	6	0	84	6	1	14	0	21	4	65	15	1	85	10	2	3	0	15	205
Exiting Leg	74					12					100					19					205
Total	158					33					185					34					410



PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Buses

	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	3	0	0	3	1	0	3	0	4	1	9	1	0	11	0	0	0	0	0	18
6:45 AM	0	4	0	0	4	1	0	2	0	3	1	5	2	0	8	0	0	0	0	0	15
Total	0	7	0	0	7	2	0	5	0	7	2	14	3	0	19	0	0	0	0	0	33
7:00 AM	0	6	0	0	6	1	0	3	0	4	1	6	3	0	10	0	0	0	0	0	20
7:15 AM	0	6	0	0	6	1	0	1	0	2	1	15	3	0	19	0	0	0	0	0	27
7:30 AM	0	4	0	0	4	0	0	4	0	4	1	7	1	0	9	0	0	0	0	0	17
7:45 AM	0	8	0	0	8	2	0	4	0	6	1	7	2	0	10	1	0	1	0	2	26
Total	0	24	0	0	24	4	0	12	0	16	4	35	9	0	48	1	0	1	0	2	90
8:00 AM	0	7	2	0	9	1	0	2	0	3	1	10	0	0	11	0	0	0	0	0	23
8:15 AM	0	6	0	0	6	2	0	2	0	4	0	14	4	0	18	0	0	0	0	0	28
8:30 AM	1	9	0	0	10	2	0	2	0	4	0	3	0	0	3	0	0	0	0	0	17
8:45 AM	0	8	0	0	8	3	0	3	0	6	1	9	2	0	12	0	0	0	0	0	26
Total	1	30	2	0	33	8	0	9	0	17	2	36	6	0	44	0	0	0	0	0	94
9:00 AM	0	5	0	0	5	2	0	3	0	5	2	11	2	0	15	0	0	0	0	0	25
9:15 AM	0	14	0	0	14	1	0	4	0	5	0	7	3	0	10	0	0	0	0	0	29
Total	0	19	0	0	19	3	0	7	0	10	2	18	5	0	25	0	0	0	0	0	54
Grand Total	1	80	2	0	83	17	0	33	0	50	10	103	23	0	136	1	0	1	0	2	271
Approach %	1.2	96.4	2.4	0.0		34.0	0.0	66.0	0.0		7.4	75.7	16.9	0.0		50.0	0.0	50.0	0.0		
Total %	0.4	29.5	0.7	0.0	30.6	6.3	0.0	12.2	0.0	18.5	3.7	38.0	8.5	0.0	50.2	0.4	0.0	0.4	0.0	0.7	
Exiting Leg Total	121					12					114					24					271

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:30 AM	1	9	0	0	10	2	0	2	0	4	0	3	0	0	3	0	0	0	0	0	17
8:45 AM	0	8	0	0	8	3	0	3	0	6	1	9	2	0	12	0	0	0	0	0	26
9:00 AM	0	5	0	0	5	2	0	3	0	5	2	11	2	0	15	0	0	0	0	0	25
9:15 AM	0	14	0	0	14	1	0	4	0	5	0	7	3	0	10	0	0	0	0	0	29
Total Volume	1	36	0	0	37	8	0	12	0	20	3	30	7	0	40	0	0	0	0	0	97
% Approach Total	2.7	97.3	0.0	0.0		40.0	0.0	60.0	0.0		7.5	75.0	17.5	0.0		0.0	0.0	0.0	0.0		
PHF	0.250	0.643	0.000	0.000	0.661	0.667	0.000	0.750	0.000	0.833	0.375	0.682	0.583	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.836
Entering Leg	1	36	0	0	37	8	0	12	0	20	3	30	7	0	40	0	0	0	0	0	97
Exiting Leg	38					3					48					8					97
Total	75					23					88					8					194

PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



**Bicycles (on Roadway and Crosswalks)**

	Route 1A								Boardman Street								Route 1A								Boardman Street								Total
	North								East								South								West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total					
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1				
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0							
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
Exiting Leg Total	0							1							0							0							1				

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:30 AM	Route 1A							Boardman Street							Route 1A							Boardman Street							
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg	0							1							0							0							1
Total	0							2							0							0							2

PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Pedestrians

	Route 1A							Boardman Street							Route 1A							Boardman Street							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
7:00 AM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:15 AM	0	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
7:30 AM	0	0	0	0	4	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
7:45 AM	0	0	0	0	2	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Total	0	0	0	0	8	8	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
8:00 AM	0	0	0	0	3	4	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
8:15 AM	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
8:30 AM	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
8:45 AM	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Total	0	0	0	0	5	13	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
9:00 AM	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
9:15 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Grand Total	0	0	0	0	14	26	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
Approach %	0.0	0.0	0.0	0.0	35.0	65.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	35.0	65.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	40							0							0							0							40

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:30 AM	Route 1A							Boardman Street							Route 1A							Boardman Street							
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:30 AM	0	0	0	0	4	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
7:45 AM	0	0	0	0	2	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	0	0	0	3	4	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8:15 AM	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Total Volume	0	0	0	0	9	14	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
% Approach Total	0.0	0.0	0.0	0.0	39.1	60.9		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.563	0.700	0.821	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.821	
Entering Leg	0	0	0	0	9	14	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Exiting Leg	23							0							0							0							23
Total	46							0							0							0							46

PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	3	370	61	2	436	37	3	75	0	115	25	435	24	11	495	29	4	16	0	49	1095
3:45 PM	3	418	46	6	473	29	0	65	0	94	17	468	13	2	500	16	6	15	0	37	1104
Total	6	788	107	8	909	66	3	140	0	209	42	903	37	13	995	45	10	31	0	86	2199
4:00 PM	7	331	21	4	363	47	0	61	0	108	22	469	16	9	516	26	1	24	0	51	1038
4:15 PM	6	352	47	5	410	56	3	55	0	114	15	443	11	17	486	14	8	17	0	39	1049
4:30 PM	4	349	35	6	394	44	5	79	0	128	20	398	19	10	447	22	5	25	0	52	1021
4:45 PM	4	393	43	6	446	51	7	38	0	96	10	476	21	5	512	19	1	17	0	37	1091
Total	21	1425	146	21	1613	198	15	233	0	446	67	1786	67	41	1961	81	15	83	0	179	4199
5:00 PM	5	368	37	6	416	53	8	51	0	112	39	469	9	12	529	21	7	22	0	50	1107
5:15 PM	5	320	40	6	371	41	3	42	0	86	17	481	10	12	520	24	2	20	0	46	1023
5:30 PM	5	357	31	4	397	50	6	46	0	102	26	491	6	12	535	16	6	18	0	40	1074
5:45 PM	3	296	37	7	343	64	3	57	0	124	23	449	3	13	488	14	3	14	0	31	986
Total	18	1341	145	23	1527	208	20	196	0	424	105	1890	28	49	2072	75	18	74	0	167	4190
6:00 PM	1	322	45	10	378	74	6	69	0	149	22	435	16	9	482	11	6	8	0	25	1034
6:15 PM	4	315	35	8	362	46	3	51	0	100	26	463	12	12	513	19	5	17	0	41	1016
Total	5	637	80	18	740	120	9	120	0	249	48	898	28	21	995	30	11	25	0	66	2050
Grand Total	50	4191	478	70	4789	592	47	689	0	1328	262	5477	160	124	6023	231	54	213	0	498	12638
Approach %	1.0	87.5	10.0	1.5		44.6	3.5	51.9	0.0		4.3	90.9	2.7	2.1		46.4	10.8	42.8	0.0		
Total %	0.4	33.2	3.8	0.6	37.9	4.7	0.4	5.5	0.0	10.5	2.1	43.3	1.3	1.0	47.7	1.8	0.4	1.7	0.0	3.9	
Exiting Leg Total	6352					794					5235					257					12638
Cars	43	3997	472	70	4582	565	45	654	0	1264	251	5218	102	124	5695	205	52	203	0	460	12001
% Cars	86.0	95.4	98.7	100.0	95.7	95.4	95.7	94.9	0.0	95.2	95.8	95.3	63.8	100.0	94.6	88.7	96.3	95.3	0.0	92.4	95.0
Exiting Leg Total	6056					775					4980					190					12001
Heavy Vehicles	7	111	5	0	123	10	2	8	0	20	2	184	48	0	234	26	1	10	0	37	414
% Heavy Vehicles	14.0	2.6	1.0	0.0	2.6	1.7	4.3	1.2	0.0	1.5	0.8	3.4	30.0	0.0	3.9	11.3	1.9	4.7	0.0	7.4	3.3
Exiting Leg Total	204					8					145					57					414
Buses	0	83	1	0	84	17	0	27	0	44	9	75	10	0	94	0	1	0	0	1	223
% Buses	0.0	2.0	0.2	0.0	1.8	2.9	0.0	3.9	0.0	3.3	3.4	1.4	6.3	0.0	1.6	0.0	1.9	0.0	0.0	0.2	1.8
Exiting Leg Total	92					11					110					10					223

### Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:45 PM	4	393	43	6	446	51	7	38	0	96	10	476	21	5	512	19	1	17	0	37	1091
5:00 PM	5	368	37	6	416	53	8	51	0	112	39	469	9	12	529	21	7	22	0	50	1107
5:15 PM	5	320	40	6	371	41	3	42	0	86	17	481	10	12	520	24	2	20	0	46	1023
5:30 PM	5	357	31	4	397	50	6	46	0	102	26	491	6	12	535	16	6	18	0	40	1074
Total Volume	19	1438	151	22	1630	195	24	177	0	396	92	1917	46	41	2096	80	16	77	0	173	4295
% Approach Total	1.2	88.2	9.3	1.3		49.2	6.1	44.7	0.0		4.4	91.5	2.2	2.0		46.2	9.2	44.5	0.0		
PHF	0.950	0.915	0.878	0.917	0.914	0.920	0.750	0.868	0.000	0.884	0.590	0.976	0.548	0.854	0.979	0.833	0.571	0.875	0.000	0.865	0.970
Cars	17	1370	149	22	1558	185	24	169	0	378	91	1845	29	41	2006	73	15	76	0	164	4106
Cars %	89.5	95.3	98.7	100.0	95.6	94.9	100.0	95.5	0.0	95.5	98.9	96.2	63.0	100.0	95.7	91.3	93.8	98.7	0.0	94.8	95.6
Heavy Vehicles	2	47	1	0	50	3	0	1	0	4	0	47	13	0	60	7	1	1	0	9	123
Heavy Vehicles %	10.5	3.3	0.7	0.0	3.1	1.5	0.0	0.6	0.0	1.0	0.0	2.5	28.3	0.0	2.9	8.8	6.3	1.3	0.0	5.2	2.9
Buses	0	21	1	0	22	7	0	7	0	14	1	25	4	0	30	0	0	0	0	0	66
Buses %	0.0	1.5	0.7	0.0	1.3	3.6	0.0	4.0	0.0	3.5	1.1	1.3	8.7	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Cars Enter Leg	17	1370	149	22	1558	185	24	169	0	378	91	1845	29	41	2006	73	15	76	0	164	4106
Heavy Enter Leg	2	47	1	0	50	3	0	1	0	4	0	47	13	0	60	7	1	1	0	9	123
Bus Enter Leg	0	21	1	0	22	7	0	7	0	14	1	25	4	0	30	0	0	0	0	0	66
Total Entering Leg	19	1438	151	22	1630	195	24	177	0	396	92	1917	46	41	2096	80	16	77	0	173	4295

PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



**Cars, Heavy Vehicles, and Buses (Combined)**

	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
Cars Exiting Leg	2128					255					1653					70					4106
Heavy Exiting Leg	51					2					55					15					123
Buses Exiting Leg	32					2					28					4					66
Total Exiting Leg	2211					259					1736					89					4295

PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars

	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	3	347	60	2	412	36	3	73	0	112	23	407	18	11	459	28	3	16	0	47	1030
3:45 PM	1	400	45	6	452	27	0	62	0	89	15	440	12	2	469	13	6	13	0	32	1042
Total	4	747	105	8	864	63	3	135	0	201	38	847	30	13	928	41	9	29	0	79	2072
4:00 PM	7	307	21	4	339	44	0	58	0	102	20	447	10	9	486	19	1	23	0	43	970
4:15 PM	6	337	47	5	395	54	3	50	0	107	15	415	7	17	454	11	8	15	0	34	990
4:30 PM	3	336	35	6	380	42	5	76	0	123	19	372	12	10	413	20	5	24	0	49	965
4:45 PM	4	378	43	6	431	48	7	35	0	90	10	455	15	5	485	18	1	17	0	36	1042
Total	20	1358	146	21	1545	188	15	219	0	422	64	1689	44	41	1838	68	15	79	0	162	3967
5:00 PM	5	344	37	6	392	52	8	51	0	111	38	448	5	12	503	19	7	22	0	48	1054
5:15 PM	4	303	39	6	352	38	3	40	0	81	17	468	7	12	504	22	2	20	0	44	981
5:30 PM	4	345	30	4	383	47	6	43	0	96	26	474	2	12	514	14	5	17	0	36	1029
5:45 PM	3	287	37	7	334	60	3	51	0	114	22	431	3	13	469	14	3	13	0	30	947
Total	16	1279	143	23	1461	197	20	185	0	402	103	1821	17	49	1990	69	17	72	0	158	4011
6:00 PM	1	310	44	10	365	73	5	66	0	144	22	422	7	9	460	11	6	8	0	25	994
6:15 PM	2	303	34	8	347	44	2	49	0	95	24	439	4	12	479	16	5	15	0	36	957
Total	3	613	78	18	712	117	7	115	0	239	46	861	11	21	939	27	11	23	0	61	1951
Grand Total	43	3997	472	70	4582	565	45	654	0	1264	251	5218	102	124	5695	205	52	203	0	460	12001
Approach %	0.9	87.2	10.3	1.5		44.7	3.6	51.7	0.0		4.4	91.6	1.8	2.2		44.6	11.3	44.1	0.0		
Total %	0.4	33.3	3.9	0.6	38.2	4.7	0.4	5.4	0.0	10.5	2.1	43.5	0.8	1.0	47.5	1.7	0.4	1.7	0.0	3.8	
Exiting Leg Total	6056					775					4980					190					12001

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:45 PM	4	378	43	6	431	48	7	35	0	90	10	455	15	5	485	18	1	17	0	36	1042
5:00 PM	5	344	37	6	392	52	8	51	0	111	38	448	5	12	503	19	7	22	0	48	1054
5:15 PM	4	303	39	6	352	38	3	40	0	81	17	468	7	12	504	22	2	20	0	44	981
5:30 PM	4	345	30	4	383	47	6	43	0	96	26	474	2	12	514	14	5	17	0	36	1029
Total Volume	17	1370	149	22	1558	185	24	169	0	378	91	1845	29	41	2006	73	15	76	0	164	4106
% Approach Total	1.1	87.9	9.6	1.4		48.9	6.3	44.7	0.0		4.5	92.0	1.4	2.0		44.5	9.1	46.3	0.0		
PHF	0.850	0.906	0.866	0.917	0.904	0.889	0.750	0.828	0.000	0.851	0.599	0.973	0.483	0.854	0.976	0.830	0.536	0.864	0.000	0.854	0.974
Entering Leg	17	1370	149	22	1558	185	24	169	0	378	91	1845	29	41	2006	73	15	76	0	164	4106
Exiting Leg	2128					255					1653					70					4106
Total	3686					633					3659					234					8212

PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	13	1	0	14	0	0	1	0	1	1	19	5	0	25	1	0	0	0	1	41
3:45 PM	2	8	1	0	11	0	0	2	0	2	1	22	1	0	24	3	0	2	0	5	42
Total	2	21	2	0	25	0	0	3	0	3	2	41	6	0	49	4	0	2	0	6	83
4:00 PM	0	11	0	0	11	1	0	0	0	1	0	16	5	0	21	7	0	1	0	8	41
4:15 PM	0	9	0	0	9	1	0	1	0	2	0	24	2	0	26	3	0	2	0	5	42
4:30 PM	1	6	0	0	7	1	0	0	0	1	0	20	6	0	26	2	0	1	0	3	37
4:45 PM	0	14	0	0	14	1	0	0	0	1	0	12	5	0	17	1	0	0	0	1	33
Total	1	40	0	0	41	4	0	1	0	5	0	72	18	0	90	13	0	4	0	17	153
5:00 PM	0	17	0	0	17	1	0	0	0	1	0	16	3	0	19	2	0	0	0	2	39
5:15 PM	1	12	0	0	13	1	0	0	0	1	0	11	3	0	14	2	0	0	0	2	30
5:30 PM	1	4	1	0	6	0	0	1	0	1	0	8	2	0	10	2	1	1	0	4	21
5:45 PM	0	4	0	0	4	3	0	2	0	5	0	10	0	0	10	0	0	1	0	1	20
Total	2	37	1	0	40	5	0	3	0	8	0	45	8	0	53	6	1	2	0	9	110
6:00 PM	0	5	1	0	6	0	1	1	0	2	0	8	9	0	17	0	0	0	0	0	25
6:15 PM	2	8	1	0	11	1	1	0	0	2	0	18	7	0	25	3	0	2	0	5	43
Total	2	13	2	0	17	1	2	1	0	4	0	26	16	0	42	3	0	2	0	5	68
Grand Total	7	111	5	0	123	10	2	8	0	20	2	184	48	0	234	26	1	10	0	37	414
Approach %	5.7	90.2	4.1	0.0		50.0	10.0	40.0	0.0		0.9	78.6	20.5	0.0		70.3	2.7	27.0	0.0		
Total %	1.7	26.8	1.2	0.0	29.7	2.4	0.5	1.9	0.0	4.8	0.5	44.4	11.6	0.0	56.5	6.3	0.2	2.4	0.0	8.9	
Exiting Leg Total	204					8					145					57					414

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	13	1	0	14	0	0	1	0	1	1	19	5	0	25	1	0	0	0	1	41
3:45 PM	2	8	1	0	11	0	0	2	0	2	1	22	1	0	24	3	0	2	0	5	42
4:00 PM	0	11	0	0	11	1	0	0	0	1	0	16	5	0	21	7	0	1	0	8	41
4:15 PM	0	9	0	0	9	1	0	1	0	2	0	24	2	0	26	3	0	2	0	5	42
Total Volume	2	41	2	0	45	2	0	4	0	6	2	81	13	0	96	14	0	5	0	19	166
% Approach Total	4.4	91.1	4.4	0.0		33.3	0.0	66.7	0.0		2.1	84.4	13.5	0.0		73.7	0.0	26.3	0.0		
PHF	0.250	0.788	0.500	0.000	0.804	0.500	0.000	0.500	0.000	0.750	0.500	0.844	0.650	0.000	0.923	0.500	0.000	0.625	0.000	0.594	0.988
Entering Leg	2	41	2	0	45	2	0	4	0	6	2	81	13	0	96	14	0	5	0	19	166
Exiting Leg	88					4					59					15					166
Total	133					10					155					34					332

PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	10	0	0	10	1	0	1	0	2	1	9	1	0	11	0	1	0	0	1	24
3:45 PM	0	10	0	0	10	2	0	1	0	3	1	6	0	0	7	0	0	0	0	0	20
Total	0	20	0	0	20	3	0	2	0	5	2	15	1	0	18	0	1	0	0	1	44
4:00 PM	0	13	0	0	13	2	0	3	0	5	2	6	1	0	9	0	0	0	0	0	27
4:15 PM	0	6	0	0	6	1	0	4	0	5	0	4	2	0	6	0	0	0	0	0	17
4:30 PM	0	7	0	0	7	1	0	3	0	4	1	6	1	0	8	0	0	0	0	0	19
4:45 PM	0	1	0	0	1	2	0	3	0	5	0	9	1	0	10	0	0	0	0	0	16
Total	0	27	0	0	27	6	0	13	0	19	3	25	5	0	33	0	0	0	0	0	79
5:00 PM	0	7	0	0	7	0	0	0	0	0	1	5	1	0	7	0	0	0	0	0	14
5:15 PM	0	5	1	0	6	2	0	2	0	4	0	2	0	0	2	0	0	0	0	0	12
5:30 PM	0	8	0	0	8	3	0	2	0	5	0	9	2	0	11	0	0	0	0	0	24
5:45 PM	0	5	0	0	5	1	0	4	0	5	1	8	0	0	9	0	0	0	0	0	19
Total	0	25	1	0	26	6	0	8	0	14	2	24	3	0	29	0	0	0	0	0	69
6:00 PM	0	7	0	0	7	1	0	2	0	3	0	5	0	0	5	0	0	0	0	0	15
6:15 PM	0	4	0	0	4	1	0	2	0	3	2	6	1	0	9	0	0	0	0	0	16
Total	0	11	0	0	11	2	0	4	0	6	2	11	1	0	14	0	0	0	0	0	31
Grand Total	0	83	1	0	84	17	0	27	0	44	9	75	10	0	94	0	1	0	0	1	223
Approach %	0.0	98.8	1.2	0.0		38.6	0.0	61.4	0.0		9.6	79.8	10.6	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	37.2	0.4	0.0	37.7	7.6	0.0	12.1	0.0	19.7	4.0	33.6	4.5	0.0	42.2	0.0	0.4	0.0	0.0	0.4	
Exiting Leg Total	92					11					110					10					223

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A					Boardman Street					Route 1A					Boardman Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	10	0	0	10	1	0	1	0	2	1	9	1	0	11	0	1	0	0	1	24
3:45 PM	0	10	0	0	10	2	0	1	0	3	1	6	0	0	7	0	0	0	0	0	20
4:00 PM	0	13	0	0	13	2	0	3	0	5	2	6	1	0	9	0	0	0	0	0	27
4:15 PM	0	6	0	0	6	1	0	4	0	5	0	4	2	0	6	0	0	0	0	0	17
Total Volume	0	39	0	0	39	6	0	9	0	15	4	25	4	0	33	0	1	0	0	1	88
% Approach Total	0.0	100.0	0.0	0.0		40.0	0.0	60.0	0.0		12.1	75.8	12.1	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.750	0.000	0.000	0.750	0.750	0.000	0.563	0.000	0.750	0.500	0.694	0.500	0.000	0.750	0.000	0.250	0.000	0.000	0.250	0.815
Entering Leg	0	39	0	0	39	6	0	9	0	15	4	25	4	0	33	0	1	0	0	1	88
Exiting Leg	31					5					48					4					88
Total	70					20					81					5					176



PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



**Bicycles (on Roadway and Crosswalks)**

	Route 1A								Boardman Street								Route 1A								Boardman Street								Total
	North								East								South								West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1				
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1				
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	2	2
Approach %	0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0						
Total %	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0					
Exiting Leg Total	0							0							1							1							2				

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A							Boardman Street							Route 1A							Boardman Street							
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250		0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	
Exiting Leg	0							0							0							1							1
Total	0							0							0							2							2

PDI File #: **175607 (6)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Boardman Street W: Boardman Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Pedestrians

	Route 1A							Boardman Street							Route 1A							Boardman Street							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
5:00 PM	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Grand Total	0	0	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	0	2	11
Approach %	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		
Total %	0.0	0.0	0.0	0.0	72.7	0.0	72.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	9.1	0.0	0.0	0.0	0.0	18.2	0.0	18.2	
Exiting Leg Total	8							0							1							2							11

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:30 PM	Route 1A							Boardman Street							Route 1A							Boardman Street							
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:30 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	
5:00 PM	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
5:15 PM	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Total Volume	0	0	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	9	
% Approach Total	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.400	0.000	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.450	
Entering Leg	0	0	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	9	
Exiting Leg	8							0							0							1							9
Total	16							0							0							2							18

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	572	0	0	572	25	0	0	25	18	219	0	237	834
6:45 AM	541	0	0	541	34	0	0	34	20	243	0	263	838
Total	1113	0	0	1113	59	0	0	59	38	462	0	500	1672
7:00 AM	520	0	0	520	42	0	0	42	14	279	0	293	855
7:15 AM	552	0	0	552	38	0	0	38	17	282	0	299	889
7:30 AM	543	0	0	543	25	0	0	25	22	249	0	271	839
7:45 AM	529	0	0	529	40	0	0	40	9	247	0	256	825
Total	2144	0	0	2144	145	0	0	145	62	1057	0	1119	3408
8:00 AM	505	0	0	505	25	0	0	25	21	293	0	314	844
8:15 AM	546	0	0	546	19	0	0	19	30	281	0	311	876
8:30 AM	518	0	0	518	20	0	0	20	13	256	0	269	807
8:45 AM	494	0	0	494	15	0	0	15	20	265	0	285	794
Total	2063	0	0	2063	79	0	0	79	84	1095	0	1179	3321
9:00 AM	446	0	0	446	18	0	0	18	22	267	0	289	753
9:15 AM	457	0	0	457	24	0	0	24	38	284	0	322	803
Total	903	0	0	903	42	0	0	42	60	551	0	611	1556
Grand Total	6223	0	0	6223	325	0	0	325	244	3165	0	3409	9957
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		7.2	92.8	0.0		
Total %	62.5	0.0	0.0	62.5	3.3	0.0	0.0	3.3	2.5	31.8	0.0	34.2	
Exiting Leg Total	3490				244				6223				9957
Cars	5892	0	0	5892	317	0	0	317	193	2892	0	3085	9294
% Cars	94.7	0.0	0.0	94.7	97.5	0.0	0.0	97.5	79.1	91.4	0.0	90.5	93.3
Exiting Leg Total	3209				193				5892				9294
Heavy Vehicles	269	0	0	269	5	0	0	5	11	191	0	202	476
% Heavy Vehicles	4.3	0.0	0.0	4.3	1.5	0.0	0.0	1.5	4.5	6.0	0.0	5.9	4.8
Exiting Leg Total	196				11				269				476
Buses	62	0	0	62	3	0	0	3	40	82	0	122	187
% Buses	1.0	0.0	0.0	1.0	0.9	0.0	0.0	0.9	16.4	2.6	0.0	3.6	1.9
Exiting Leg Total	85				40				62				187

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:45 AM	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:45 AM	541	0	0	541	34	0	0	34	20	243	0	263	838
7:00 AM	520	0	0	520	42	0	0	42	14	279	0	293	855
7:15 AM	552	0	0	552	38	0	0	38	17	282	0	299	889
7:30 AM	543	0	0	543	25	0	0	25	22	249	0	271	839
Total Volume	2156	0	0	2156	139	0	0	139	73	1053	0	1126	3421
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		6.5	93.5	0.0		
PHF	0.976	0.000	0.000	0.976	0.827	0.000	0.000	0.827	0.830	0.934	0.000	0.941	0.962
Cars	2051	0	0	2051	137	0	0	137	55	964	0	1019	3207
Cars %	95.1	0.0	0.0	95.1	98.6	0.0	0.0	98.6	75.3	91.5	0.0	90.5	93.7
Heavy Vehicles	90	0	0	90	2	0	0	2	5	65	0	70	162
Heavy Vehicles %	4.2	0.0	0.0	4.2	1.4	0.0	0.0	1.4	6.8	6.2	0.0	6.2	4.7
Buses	15	0	0	15	0	0	0	0	13	24	0	37	52
Buses %	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	17.8	2.3	0.0	3.3	1.5
Cars Enter Leg	2051	0	0	2051	137	0	0	137	55	964	0	1019	3207
Heavy Enter Leg	90	0	0	90	2	0	0	2	5	65	0	70	162
Bus Enter Leg	15	0	0	15	0	0	0	0	13	24	0	37	52
Total Entering Leg	2156	0	0	2156	139	0	0	139	73	1053	0	1126	3421
Cars Exiting Leg				1101				55				2051	3207

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Heavy Exiting Leg	67				5				90				162
Buses Exiting Leg	24				13				15				52
Total Exiting Leg	1192				73				2156				3421

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars

	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	536	0	0	536	25	0	0	25	13	203	0	216	777
6:45 AM	519	0	0	519	34	0	0	34	17	231	0	248	801
Total	1055	0	0	1055	59	0	0	59	30	434	0	464	1578
7:00 AM	491	0	0	491	42	0	0	42	9	251	0	260	793
7:15 AM	525	0	0	525	36	0	0	36	10	253	0	263	824
7:30 AM	516	0	0	516	25	0	0	25	19	229	0	248	789
7:45 AM	502	0	0	502	37	0	0	37	7	230	0	237	776
Total	2034	0	0	2034	140	0	0	140	45	963	0	1008	3182
8:00 AM	483	0	0	483	24	0	0	24	18	266	0	284	791
8:15 AM	523	0	0	523	19	0	0	19	25	258	0	283	825
8:30 AM	488	0	0	488	18	0	0	18	11	235	0	246	752
8:45 AM	474	0	0	474	15	0	0	15	15	241	0	256	745
Total	1968	0	0	1968	76	0	0	76	69	1000	0	1069	3113
9:00 AM	419	0	0	419	18	0	0	18	16	242	0	258	695
9:15 AM	416	0	0	416	24	0	0	24	33	253	0	286	726
Total	835	0	0	835	42	0	0	42	49	495	0	544	1421
Grand Total	5892	0	0	5892	317	0	0	317	193	2892	0	3085	9294
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		6.3	93.7	0.0		
Total %	63.4	0.0	0.0	63.4	3.4	0.0	0.0	3.4	2.1	31.1	0.0	33.2	
Exiting Leg Total	3209				193				5892				9294

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:45 AM	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:45 AM	519	0	0	519	34	0	0	34	17	231	0	248	801
7:00 AM	491	0	0	491	42	0	0	42	9	251	0	260	793
7:15 AM	525	0	0	525	36	0	0	36	10	253	0	263	824
7:30 AM	516	0	0	516	25	0	0	25	19	229	0	248	789
Total Volume	2051	0	0	2051	137	0	0	137	55	964	0	1019	3207
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		5.4	94.6	0.0		
PHF	0.977	0.000	0.000	0.977	0.815	0.000	0.000	0.815	0.724	0.953	0.000	0.969	0.973
Entering Leg	2051	0	0	2051	137	0	0	137	55	964	0	1019	3207
Exiting Leg				1101				55				2051	3207
Total				3152				192				3070	6414

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	32	0	0	32	0	0	0	0	1	10	0	11	43
6:45 AM	18	0	0	18	0	0	0	0	0	9	0	9	27
Total	50	0	0	50	0	0	0	0	1	19	0	20	70
7:00 AM	25	0	0	25	0	0	0	0	3	23	0	26	51
7:15 AM	23	0	0	23	2	0	0	2	1	18	0	19	44
7:30 AM	24	0	0	24	0	0	0	0	1	15	0	16	40
7:45 AM	19	0	0	19	1	0	0	1	0	9	0	9	29
Total	91	0	0	91	3	0	0	3	5	65	0	70	164
8:00 AM	16	0	0	16	0	0	0	0	1	18	0	19	35
8:15 AM	19	0	0	19	0	0	0	0	0	14	0	14	33
8:30 AM	24	0	0	24	2	0	0	2	0	16	0	16	42
8:45 AM	15	0	0	15	0	0	0	0	1	17	0	18	33
Total	74	0	0	74	2	0	0	2	2	65	0	67	143
9:00 AM	24	0	0	24	0	0	0	0	2	17	0	19	43
9:15 AM	30	0	0	30	0	0	0	0	1	25	0	26	56
Total	54	0	0	54	0	0	0	0	3	42	0	45	99
Grand Total	269	0	0	269	5	0	0	5	11	191	0	202	476
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		5.4	94.6	0.0		
Total %	56.5	0.0	0.0	56.5	1.1	0.0	0.0	1.1	2.3	40.1	0.0	42.4	
Exiting Leg Total	196				11				269				476

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
8:30 AM	24	0	0	24	2	0	0	2	0	16	0	16	42
8:45 AM	15	0	0	15	0	0	0	0	1	17	0	18	33
9:00 AM	24	0	0	24	0	0	0	0	2	17	0	19	43
9:15 AM	30	0	0	30	0	0	0	0	1	25	0	26	56
Total Volume	93	0	0	93	2	0	0	2	4	75	0	79	174
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		5.1	94.9	0.0		
PHF	0.775	0.000	0.000	0.775	0.250	0.000	0.000	0.250	0.500	0.750	0.000	0.760	0.777
Entering Leg	93	0	0	93	2	0	0	2	4	75	0	79	174
Exiting Leg				77				4				93	174
Total				170				6				172	348

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Buses

	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	4	0	0	4	0	0	0	0	4	6	0	10	14
6:45 AM	4	0	0	4	0	0	0	0	3	3	0	6	10
Total	8	0	0	8	0	0	0	0	7	9	0	16	24
7:00 AM	4	0	0	4	0	0	0	0	2	5	0	7	11
7:15 AM	4	0	0	4	0	0	0	0	6	11	0	17	21
7:30 AM	3	0	0	3	0	0	0	0	2	5	0	7	10
7:45 AM	8	0	0	8	2	0	0	2	2	8	0	10	20
Total	19	0	0	19	2	0	0	2	12	29	0	41	62
8:00 AM	6	0	0	6	1	0	0	1	2	9	0	11	18
8:15 AM	4	0	0	4	0	0	0	0	5	9	0	14	18
8:30 AM	6	0	0	6	0	0	0	0	2	5	0	7	13
8:45 AM	5	0	0	5	0	0	0	0	4	7	0	11	16
Total	21	0	0	21	1	0	0	1	13	30	0	43	65
9:00 AM	3	0	0	3	0	0	0	0	4	8	0	12	15
9:15 AM	11	0	0	11	0	0	0	0	4	6	0	10	21
Total	14	0	0	14	0	0	0	0	8	14	0	22	36
Grand Total	62	0	0	62	3	0	0	3	40	82	0	122	187
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		32.8	67.2	0.0		
Total %	33.2	0.0	0.0	33.2	1.6	0.0	0.0	1.6	21.4	43.9	0.0	65.2	
Exiting Leg Total	85				40				62				187

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:15 AM	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:15 AM	4	0	0	4	0	0	0	0	6	11	0	17	21
7:30 AM	3	0	0	3	0	0	0	0	2	5	0	7	10
7:45 AM	8	0	0	8	2	0	0	2	2	8	0	10	20
8:00 AM	6	0	0	6	1	0	0	1	2	9	0	11	18
Total Volume	21	0	0	21	3	0	0	3	12	33	0	45	69
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		26.7	73.3	0.0		
PHF	0.656	0.000	0.000	0.656	0.375	0.000	0.000	0.375	0.500	0.750	0.000	0.662	0.821
Entering Leg	21	0	0	21	3	0	0	3	12	33	0	45	69
Exiting Leg				36				12				21	69
Total				57				15				66	138

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



Class:

**Bicycles (on Roadway and Crosswalks)**

	Route 1A						Waldemar Street						Route 1A						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
6:30 AM	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2	0	0	0	0	2	1	0	0	0	0	0	1	0	0	0	0	0	0	3
Approach %	100.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	66.7	0.0	0.0	0.0	0.0	66.7	33.3	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	1						0						2						3	

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:30 AM	Route 1A						Waldemar Street						Route 1A						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
6:30 AM	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	2	0	0	0	0	2	1	0	0	0	0	0	1	0	0	0	0	0	0	3
% Approach Total	100.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.250		0.000	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	2	0	0	0	0	2	1	0	0	0	0	1		0	0	0	0	0	0	3
Exiting Leg	1						0						2						3	
Total	3						1						2						6	



PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Pedestrians

	Route 1A						Waldemar Street						Route 1A						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	2	4	6	0	0	0	0	0	0	0	6
9:15 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	2	6	8	0	0	0	0	0	0	8
Grand Total	0	0	0	0	0	0	0	0	0	0	4	6	10	0	0	0	0	0	0	10
Approach %	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	40.0	60.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	40.0	60.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0						10						0						10	

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	Route 1A							Waldemar Street							Route 1A							Total
	North							East							South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total		Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total			
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	
9:00 AM	0	0	0	0	0	0	0	0	0	0	2	4	6	0	0	0	0	0	0	0	6	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	2	
Total Volume	0	0	0	0	0	0	0	0	0	0	3	6	9	0	0	0	0	0	0	0	9	
% Approach Total	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	33.3	66.7		0.0	0.0	0.0	0.0	0.0				
PHF	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.375	0.375	0.375	0.000	0.000	0.000	0.000	0.000	0.000			0.375
Entering Leg	0	0	0	0	0	0		0	0	0	3	6	9	0	0	0	0	0	0			9
Exiting Leg	0							9							0							9
Total	0							18							0							18

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	438	0	0	438	31	0	0	31	25	473	0	498	967
3:45 PM	451	0	0	451	19	0	0	19	25	489	0	514	984
Total	889	0	0	889	50	0	0	50	50	962	0	1012	1951
4:00 PM	377	0	0	377	23	0	0	23	37	534	0	571	971
4:15 PM	427	0	0	427	25	0	0	25	25	508	0	533	985
4:30 PM	411	0	0	411	21	0	0	21	23	472	0	495	927
4:45 PM	406	0	0	406	22	0	0	22	26	517	0	543	971
Total	1621	0	0	1621	91	0	0	91	111	2031	0	2142	3854
5:00 PM	407	0	0	407	27	0	0	27	27	529	0	556	990
5:15 PM	372	0	0	372	20	0	0	20	27	525	0	552	944
5:30 PM	406	0	0	406	30	0	0	30	22	568	0	590	1026
5:45 PM	376	0	0	376	26	0	0	26	23	539	0	562	964
Total	1561	0	0	1561	103	0	0	103	99	2161	0	2260	3924
6:00 PM	373	0	0	373	16	0	0	16	31	516	0	547	936
6:15 PM	356	0	0	356	25	0	0	25	21	506	0	527	908
Total	729	0	0	729	41	0	0	41	52	1022	0	1074	1844
Grand Total	4800	0	0	4800	285	0	0	285	312	6176	0	6488	11573
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		4.8	95.2	0.0		
Total %	41.5	0.0	0.0	41.5	2.5	0.0	0.0	2.5	2.7	53.4	0.0	56.1	
Exiting Leg Total	6461				312				4800				11573
Cars	4598	0	0	4598	277	0	0	277	284	5902	0	6186	11061
% Cars	95.8	0.0	0.0	95.8	97.2	0.0	0.0	97.2	91.0	95.6	0.0	95.3	95.6
Exiting Leg Total	6179				284				4598				11061
Heavy Vehicles	129	0	0	129	5	0	0	5	2	201	0	203	337
% Heavy Vehicles	2.7	0.0	0.0	2.7	1.8	0.0	0.0	1.8	0.6	3.3	0.0	3.1	2.9
Exiting Leg Total	206				2				129				337
Buses	73	0	0	73	3	0	0	3	26	73	0	99	175
% Buses	1.5	0.0	0.0	1.5	1.1	0.0	0.0	1.1	8.3	1.2	0.0	1.5	1.5
Exiting Leg Total	76				26				73				175

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:45 PM	406	0	0	406	22	0	0	22	26	517	0	543	971
5:00 PM	407	0	0	407	27	0	0	27	27	529	0	556	990
5:15 PM	372	0	0	372	20	0	0	20	27	525	0	552	944
5:30 PM	406	0	0	406	30	0	0	30	22	568	0	590	1026
Total Volume	1591	0	0	1591	99	0	0	99	102	2139	0	2241	3931
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		4.6	95.4	0.0		
PHF	0.977	0.000	0.000	0.977	0.825	0.000	0.000	0.825	0.944	0.941	0.000	0.950	0.958
Cars	1519	0	0	1519	96	0	0	96	92	2065	0	2157	3772
Cars %	95.5	0.0	0.0	95.5	97.0	0.0	0.0	97.0	90.2	96.5	0.0	96.3	96.0
Heavy Vehicles	55	0	0	55	2	0	0	2	1	46	0	47	104
Heavy Vehicles %	3.5	0.0	0.0	3.5	2.0	0.0	0.0	2.0	1.0	2.2	0.0	2.1	2.6
Buses	17	0	0	17	1	0	0	1	9	28	0	37	55
Buses %	1.1	0.0	0.0	1.1	1.0	0.0	0.0	1.0	8.8	1.3	0.0	1.7	1.4
Cars Enter Leg	1519	0	0	1519	96	0	0	96	92	2065	0	2157	3772
Heavy Enter Leg	55	0	0	55	2	0	0	2	1	46	0	47	104
Bus Enter Leg	17	0	0	17	1	0	0	1	9	28	0	37	55
Total Entering Leg	1591	0	0	1591	99	0	0	99	102	2139	0	2241	3931

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Cars Exiting Leg	2161				92				1519				3772
Heavy Exiting Leg	48				1				55				104
Buses Exiting Leg	29				9				17				55
Total Exiting Leg	2238				102				1591				3931

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars

	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	409	0	0	409	30	0	0	30	21	448	0	469	908
3:45 PM	438	0	0	438	19	0	0	19	22	457	0	479	936
Total	847	0	0	847	49	0	0	49	43	905	0	948	1844
4:00 PM	356	0	0	356	21	0	0	21	34	511	0	545	922
4:15 PM	411	0	0	411	24	0	0	24	24	479	0	503	938
4:30 PM	397	0	0	397	20	0	0	20	20	444	0	464	881
4:45 PM	390	0	0	390	20	0	0	20	23	494	0	517	927
Total	1554	0	0	1554	85	0	0	85	101	1928	0	2029	3668
5:00 PM	385	0	0	385	26	0	0	26	27	510	0	537	948
5:15 PM	352	0	0	352	20	0	0	20	24	510	0	534	906
5:30 PM	392	0	0	392	30	0	0	30	18	551	0	569	991
5:45 PM	366	0	0	366	26	0	0	26	22	514	0	536	928
Total	1495	0	0	1495	102	0	0	102	91	2085	0	2176	3773
6:00 PM	361	0	0	361	16	0	0	16	30	503	0	533	910
6:15 PM	341	0	0	341	25	0	0	25	19	481	0	500	866
Total	702	0	0	702	41	0	0	41	49	984	0	1033	1776
Grand Total	4598	0	0	4598	277	0	0	277	284	5902	0	6186	11061
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		4.6	95.4	0.0		
Total %	41.6	0.0	0.0	41.6	2.5	0.0	0.0	2.5	2.6	53.4	0.0	55.9	
Exiting Leg Total	6179				284				4598				11061

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

5:00 PM	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:00 PM	385	0	0	385	26	0	0	26	27	510	0	537	948
5:15 PM	352	0	0	352	20	0	0	20	24	510	0	534	906
5:30 PM	392	0	0	392	30	0	0	30	18	551	0	569	991
5:45 PM	366	0	0	366	26	0	0	26	22	514	0	536	928
Total Volume	1495	0	0	1495	102	0	0	102	91	2085	0	2176	3773
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		4.2	95.8	0.0		
PHF	0.953	0.000	0.000	0.953	0.850	0.000	0.000	0.850	0.843	0.946	0.000	0.956	0.952
Entering Leg	1495	0	0	1495	102	0	0	102	91	2085	0	2176	3773
Exiting Leg				2187				91				1495	3773
Total				3682				193				3671	7546

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	16	0	0	16	1	0	0	1	0	19	0	19	36
3:45 PM	7	0	0	7	0	0	0	0	0	26	0	26	33
Total	23	0	0	23	1	0	0	1	0	45	0	45	69
4:00 PM	11	0	0	11	1	0	0	1	0	18	0	18	30
4:15 PM	11	0	0	11	0	0	0	0	0	27	0	27	38
4:30 PM	7	0	0	7	1	0	0	1	0	21	0	21	29
4:45 PM	15	0	0	15	2	0	0	2	0	13	0	13	30
Total	44	0	0	44	4	0	0	4	0	79	0	79	127
5:00 PM	17	0	0	17	0	0	0	0	0	14	0	14	31
5:15 PM	17	0	0	17	0	0	0	0	1	11	0	12	29
5:30 PM	6	0	0	6	0	0	0	0	0	8	0	8	14
5:45 PM	5	0	0	5	0	0	0	0	0	17	0	17	22
Total	45	0	0	45	0	0	0	0	1	50	0	51	96
6:00 PM	6	0	0	6	0	0	0	0	0	8	0	8	14
6:15 PM	11	0	0	11	0	0	0	0	1	19	0	20	31
Total	17	0	0	17	0	0	0	0	1	27	0	28	45
Grand Total	129	0	0	129	5	0	0	5	2	201	0	203	337
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		1.0	99.0	0.0		
Total %	38.3	0.0	0.0	38.3	1.5	0.0	0.0	1.5	0.6	59.6	0.0	60.2	
Exiting Leg Total	206				2				129				337

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	16	0	0	16	1	0	0	1	0	19	0	19	36
3:45 PM	7	0	0	7	0	0	0	0	0	26	0	26	33
4:00 PM	11	0	0	11	1	0	0	1	0	18	0	18	30
4:15 PM	11	0	0	11	0	0	0	0	0	27	0	27	38
Total Volume	45	0	0	45	2	0	0	2	0	90	0	90	137
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.703	0.000	0.000	0.703	0.500	0.000	0.000	0.500	0.000	0.833	0.000	0.833	0.901
Entering Leg	45	0	0	45	2	0	0	2	0	90	0	90	137
Exiting Leg				92				0				45	137
Total				137				2				135	274

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	13	0	0	13	0	0	0	0	4	6	0	10	23
3:45 PM	6	0	0	6	0	0	0	0	3	6	0	9	15
Total	19	0	0	19	0	0	0	0	7	12	0	19	38
4:00 PM	10	0	0	10	1	0	0	1	3	5	0	8	19
4:15 PM	5	0	0	5	1	0	0	1	1	2	0	3	9
4:30 PM	7	0	0	7	0	0	0	0	3	7	0	10	17
4:45 PM	1	0	0	1	0	0	0	0	3	10	0	13	14
Total	23	0	0	23	2	0	0	2	10	24	0	34	59
5:00 PM	5	0	0	5	1	0	0	1	0	5	0	5	11
5:15 PM	3	0	0	3	0	0	0	0	2	4	0	6	9
5:30 PM	8	0	0	8	0	0	0	0	4	9	0	13	21
5:45 PM	5	0	0	5	0	0	0	0	1	8	0	9	14
Total	21	0	0	21	1	0	0	1	7	26	0	33	55
6:00 PM	6	0	0	6	0	0	0	0	1	5	0	6	12
6:15 PM	4	0	0	4	0	0	0	0	1	6	0	7	11
Total	10	0	0	10	0	0	0	0	2	11	0	13	23
Grand Total	73	0	0	73	3	0	0	3	26	73	0	99	175
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		26.3	73.7	0.0		
Total %	41.7	0.0	0.0	41.7	1.7	0.0	0.0	1.7	14.9	41.7	0.0	56.6	
Exiting Leg Total	76				26				73				175

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A				Waldemar Street				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	13	0	0	13	0	0	0	0	4	6	0	10	23
3:45 PM	6	0	0	6	0	0	0	0	3	6	0	9	15
4:00 PM	10	0	0	10	1	0	0	1	3	5	0	8	19
4:15 PM	5	0	0	5	1	0	0	1	1	2	0	3	9
Total Volume	34	0	0	34	2	0	0	2	11	19	0	30	66
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		36.7	63.3	0.0		
PHF	0.654	0.000	0.000	0.654	0.500	0.000	0.000	0.500	0.688	0.792	0.000	0.750	0.717
Entering Leg	34	0	0	34	2	0	0	2	11	19	0	30	66
Exiting Leg				21				11				34	66
Total				55				13				64	132

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



Class:

**Bicycles (on Roadway and Crosswalks)**

	Route 1A						Waldemar Street						Route 1A						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	1	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	0	0	0	0	1	0	0	0	1	0	1	1	0	0	0	0	0	1	3
Approach %	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0	0.0			
Total %	33.3	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	33.3	0.0	33.3	33.3	0.0	0.0	0.0	0.0	0.0	33.3	
Exiting Leg Total	0						2						1						3	

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A							Waldemar Street							Route 1A							Total
	North							East							South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total		Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total			
3:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1		
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	1	2		
% Approach Total	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0	0.0				
PHF	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.250	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.500		
Entering Leg	0	0	0	0	0	0		0	0	0	1	0	1	1	0	0	0	0	1	2		
Exiting Leg	0							2							0							2
Total	0							3							1							4

PDI File #: **175607 (7)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Waldemar Street**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



Class:

### Pedestrians

	Route 1A						Waldemar Street						Route 1A						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0			0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0						2						0						2	

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A							Waldemar Street							Route 1A							Total
	North							East							South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total		Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total			
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	2	
% Approach Total	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0				
PHF	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000		0.500	
Entering Leg	0	0	0	0	0	0		0	0	0	0	2	2	0	0	0	0	0	0		2	
Exiting Leg	0							2							0							2
Total	0							4							0							4



PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	512	0	1	513	2	53	0	55	9	228	12	249	817
6:45 AM	473	0	0	473	8	57	0	65	6	250	22	278	816
Total	985	0	1	986	10	110	0	120	15	478	34	527	1633
7:00 AM	422	0	1	423	2	55	0	57	15	281	28	324	804
7:15 AM	450	0	0	450	5	70	0	75	14	293	14	321	846
7:30 AM	473	0	0	473	3	58	0	61	13	248	15	276	810
7:45 AM	477	2	2	481	2	46	0	48	12	263	17	292	821
Total	1822	2	3	1827	12	229	0	241	54	1085	74	1213	3281
8:00 AM	461	0	0	461	2	29	0	31	8	302	7	317	809
8:15 AM	504	0	0	504	1	31	0	32	8	291	9	308	844
8:30 AM	471	0	0	471	1	32	0	33	10	266	4	280	784
8:45 AM	487	3	2	492	3	14	0	17	13	262	7	282	791
Total	1923	3	2	1928	7	106	0	113	39	1121	27	1187	3228
9:00 AM	431	2	0	433	3	7	0	10	12	265	5	282	725
9:15 AM	444	2	1	447	2	9	0	11	7	293	6	306	764
Total	875	4	1	880	5	16	0	21	19	558	11	588	1489
Grand Total	5605	9	7	5621	34	461	0	495	127	3242	146	3515	9631
Approach %	99.7	0.2	0.1		6.9	93.1	0.0		3.6	92.2	4.2		
Total %	58.2	0.1	0.1	58.4	0.4	4.8	0.0	5.1	1.3	33.7	1.5	36.5	
Exiting Leg Total	3283				136				6212				9631
Cars	5288	8	7	5303	28	456	0	484	118	2980	143	3241	9028
% Cars	94.3	88.9	100.0	94.3	82.4	98.9	0.0	97.8	92.9	91.9	97.9	92.2	93.7
Exiting Leg Total	3015				126				5887				9028
Heavy Vehicles	257	1	0	258	6	2	0	8	4	192	3	199	465
% Heavy Vehicles	4.6	11.1	0.0	4.6	17.6	0.4	0.0	1.6	3.1	5.9	2.1	5.7	4.8
Exiting Leg Total	198				5				262				465
Buses	60	0	0	60	0	3	0	3	5	70	0	75	138
% Buses	1.1	0.0	0.0	1.1	0.0	0.7	0.0	0.6	3.9	2.2	0.0	2.1	1.4
Exiting Leg Total	70				5				63				138

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:15 AM	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:15 AM	450	0	0	450	5	70	0	75	14	293	14	321	846
7:30 AM	473	0	0	473	3	58	0	61	13	248	15	276	810
7:45 AM	477	2	2	481	2	46	0	48	12	263	17	292	821
8:00 AM	461	0	0	461	2	29	0	31	8	302	7	317	809
Total Volume	1861	2	2	1865	12	203	0	215	47	1106	53	1206	3286
% Approach Total	99.8	0.1	0.1		5.6	94.4	0.0		3.9	91.7	4.4		
PHF	0.975	0.250	0.250	0.969	0.600	0.725	0.000	0.717	0.839	0.916	0.779	0.939	0.971
Cars	1763	2	2	1767	11	199	0	210	41	1013	52	1106	3083
Cars %	94.7	100.0	100.0	94.7	91.7	98.0	0.0	97.7	87.2	91.6	98.1	91.7	93.8
Heavy Vehicles	80	0	0	80	1	2	0	3	3	61	1	65	148
Heavy Vehicles %	4.3	0.0	0.0	4.3	8.3	1.0	0.0	1.4	6.4	5.5	1.9	5.4	4.5
Buses	18	0	0	18	0	2	0	2	3	32	0	35	55
Buses %	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.9	6.4	2.9	0.0	2.9	1.7
Cars Enter Leg	1763	2	2	1767	11	199	0	210	41	1013	52	1106	3083
Heavy Enter Leg	80	0	0	80	1	2	0	3	3	61	1	65	148
Bus Enter Leg	18	0	0	18	0	2	0	2	3	32	0	35	55
Total Entering Leg	1861	2	2	1865	12	203	0	215	47	1106	53	1206	3286
Cars Exiting Leg				1026				43				2014	3083

PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Heavy Exiting Leg	62				3				83				148
Buses Exiting Leg	32				3				20				55
Total Exiting Leg	1120				49				2117				3286

PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars

	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	476	0	1	477	2	53	0	55	8	212	12	232	764
6:45 AM	450	0	0	450	5	56	0	61	6	240	22	268	779
Total	926	0	1	927	7	109	0	116	14	452	34	500	1543
7:00 AM	394	0	1	395	1	55	0	56	14	256	28	298	749
7:15 AM	424	0	0	424	4	69	0	73	11	266	14	291	788
7:30 AM	444	0	0	444	3	58	0	61	13	226	15	254	759
7:45 AM	454	2	2	458	2	44	0	46	10	246	16	272	776
Total	1716	2	3	1721	10	226	0	236	48	994	73	1115	3072
8:00 AM	441	0	0	441	2	28	0	30	7	275	7	289	760
8:15 AM	481	0	0	481	1	31	0	32	8	265	9	282	795
8:30 AM	445	0	0	445	1	32	0	33	10	245	3	258	736
8:45 AM	468	2	2	472	2	14	0	16	13	240	7	260	748
Total	1835	2	2	1839	6	105	0	111	38	1025	26	1089	3039
9:00 AM	405	2	0	407	3	7	0	10	11	246	4	261	678
9:15 AM	406	2	1	409	2	9	0	11	7	263	6	276	696
Total	811	4	1	816	5	16	0	21	18	509	10	537	1374
Grand Total	5288	8	7	5303	28	456	0	484	118	2980	143	3241	9028
Approach %	99.7	0.2	0.1		5.8	94.2	0.0		3.6	91.9	4.4		
Total %	58.6	0.1	0.1	58.7	0.3	5.1	0.0	5.4	1.3	33.0	1.6	35.9	
Exiting Leg Total	3015				126				5887				9028

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:30 AM	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:30 AM	444	0	0	444	3	58	0	61	13	226	15	254	759
7:45 AM	454	2	2	458	2	44	0	46	10	246	16	272	776
8:00 AM	441	0	0	441	2	28	0	30	7	275	7	289	760
8:15 AM	481	0	0	481	1	31	0	32	8	265	9	282	795
Total Volume	1820	2	2	1824	8	161	0	169	38	1012	47	1097	3090
% Approach Total	99.8	0.1	0.1		4.7	95.3	0.0		3.5	92.3	4.3		
PHF	0.946	0.250	0.250	0.948	0.667	0.694	0.000	0.693	0.731	0.920	0.734	0.949	0.972
Entering Leg	1820	2	2	1824	8	161	0	169	38	1012	47	1097	3090
Exiting Leg				1022				40				2028	3090
Total				2846				209				3125	6180

PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	32	0	0	32	0	0	0	0	0	11	0	11	43
6:45 AM	19	0	0	19	3	0	0	3	0	7	0	7	29
Total	51	0	0	51	3	0	0	3	0	18	0	18	72
7:00 AM	25	0	0	25	1	0	0	1	1	21	0	22	48
7:15 AM	21	0	0	21	1	1	0	2	3	17	0	20	43
7:30 AM	26	0	0	26	0	0	0	0	0	17	0	17	43
7:45 AM	17	0	0	17	0	1	0	1	0	9	1	10	28
Total	89	0	0	89	2	2	0	4	4	64	1	69	162
8:00 AM	16	0	0	16	0	0	0	0	0	18	0	18	34
8:15 AM	19	0	0	19	0	0	0	0	0	16	0	16	35
8:30 AM	19	0	0	19	0	0	0	0	0	19	1	20	39
8:45 AM	15	1	0	16	1	0	0	1	0	18	0	18	35
Total	69	1	0	70	1	0	0	1	0	71	1	72	143
9:00 AM	21	0	0	21	0	0	0	0	0	14	1	15	36
9:15 AM	27	0	0	27	0	0	0	0	0	25	0	25	52
Total	48	0	0	48	0	0	0	0	0	39	1	40	88
Grand Total	257	1	0	258	6	2	0	8	4	192	3	199	465
Approach %	99.6	0.4	0.0		75.0	25.0	0.0		2.0	96.5	1.5		
Total %	55.3	0.2	0.0	55.5	1.3	0.4	0.0	1.7	0.9	41.3	0.6	42.8	
Exiting Leg Total	198				5				262				465

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:30 AM	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	32	0	0	32	0	0	0	0	0	11	0	11	43
6:45 AM	19	0	0	19	3	0	0	3	0	7	0	7	29
7:00 AM	25	0	0	25	1	0	0	1	1	21	0	22	48
7:15 AM	21	0	0	21	1	1	0	2	3	17	0	20	43
Total Volume	97	0	0	97	5	1	0	6	4	56	0	60	163
% Approach Total	100.0	0.0	0.0		83.3	16.7	0.0		6.7	93.3	0.0		
PHF	0.758	0.000	0.000	0.758	0.417	0.250	0.000	0.500	0.333	0.667	0.000	0.682	0.849
Entering Leg	97	0	0	97	5	1	0	6	4	56	0	60	163
Exiting Leg				61				4				98	163
Total				158				10				158	326

PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



PRECISION  
 DATA  
 INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Buses

	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	4	0	0	4	0	0	0	0	1	5	0	6	10
6:45 AM	4	0	0	4	0	1	0	1	0	3	0	3	8
Total	8	0	0	8	0	1	0	1	1	8	0	9	18
7:00 AM	3	0	0	3	0	0	0	0	0	4	0	4	7
7:15 AM	5	0	0	5	0	0	0	0	0	10	0	10	15
7:30 AM	3	0	0	3	0	0	0	0	0	5	0	5	8
7:45 AM	6	0	0	6	0	1	0	1	2	8	0	10	17
Total	17	0	0	17	0	1	0	1	2	27	0	29	47
8:00 AM	4	0	0	4	0	1	0	1	1	9	0	10	15
8:15 AM	4	0	0	4	0	0	0	0	0	10	0	10	14
8:30 AM	7	0	0	7	0	0	0	0	0	2	0	2	9
8:45 AM	4	0	0	4	0	0	0	0	0	4	0	4	8
Total	19	0	0	19	0	1	0	1	1	25	0	26	46
9:00 AM	5	0	0	5	0	0	0	0	1	5	0	6	11
9:15 AM	11	0	0	11	0	0	0	0	0	5	0	5	16
Total	16	0	0	16	0	0	0	0	1	10	0	11	27
Grand Total	60	0	0	60	0	3	0	3	5	70	0	75	138
Approach %	100.0	0.0	0.0		0.0	100.0	0.0		6.7	93.3	0.0		
Total %	43.5	0.0	0.0	43.5	0.0	2.2	0.0	2.2	3.6	50.7	0.0	54.3	
Exiting Leg Total	70				5				63				138

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:15 AM	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:15 AM	5	0	0	5	0	0	0	0	0	10	0	10	15
7:30 AM	3	0	0	3	0	0	0	0	0	5	0	5	8
7:45 AM	6	0	0	6	0	1	0	1	2	8	0	10	17
8:00 AM	4	0	0	4	0	1	0	1	1	9	0	10	15
Total Volume	18	0	0	18	0	2	0	2	3	32	0	35	55
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		8.6	91.4	0.0		
PHF	0.750	0.000	0.000	0.750	0.000	0.500	0.000	0.500	0.375	0.800	0.000	0.875	0.809
Entering Leg	18	0	0	18	0	2	0	2	3	32	0	35	55
Exiting Leg				32				3				20	55
Total				50				5				55	110

PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



Class: **Bicycles (on Roadway and Crosswalks)**

	Route 1A						Tomasello Drive						Route 1A						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0						0						0						0	

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:30 AM	Route 1A							Tomasello Drive							Route 1A							Total
	North							East							South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total		Right	Left	U-Turn	CW-SB	CW-NB	Total		Right	Thru	U-Turn	CW-WB	CW-EB	Total		
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000
Entering Leg	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0
Exiting Leg	0							0							0							0
Total	0							0							0							0

PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Pedestrians

	Route 1A						Tomasello Drive						Route 1A						Total
	North						East						South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
7:45 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	2	2	0	0	0	2	0	2	0	0	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	2	2	0	0	0	2	0	2	0	0	0	0	0	0	4
Approach %	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	2						2						0						4

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	Route 1A						Tomasello Drive						Route 1A						Total
	North						East						South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	2	2	0	0	0	2	0	2	0	0	0	0	0	0	4
% Approach Total	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	0	0	0	0	2	2	0	0	0	2	0	2	0	0	0	0	0	0	4
Exiting Leg	2						2						0						4
Total	4						4						0						8

PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	428	2	4	434	2	3	0	5	51	455	10	516	955
3:45 PM	449	1	2	452	1	2	0	3	61	446	4	511	966
Total	877	3	6	886	3	5	0	8	112	901	14	1027	1921
4:00 PM	368	3	1	372	4	4	0	8	62	485	5	552	932
4:15 PM	430	3	2	435	2	1	0	3	67	471	3	541	979
4:30 PM	412	1	9	422	4	0	0	4	55	430	7	492	918
4:45 PM	426	1	1	428	1	2	0	3	64	476	1	541	972
Total	1636	8	13	1657	11	7	0	18	248	1862	16	2126	3801
5:00 PM	406	0	10	416	3	2	0	5	81	460	9	550	971
5:15 PM	371	3	4	378	2	1	0	3	70	471	5	546	927
5:30 PM	398	2	1	401	1	2	0	3	82	465	4	551	955
5:45 PM	378	7	5	390	6	2	0	8	88	460	2	550	948
Total	1553	12	20	1585	12	7	0	19	321	1856	20	2197	3801
6:00 PM	362	2	2	366	1	0	0	1	52	461	6	519	886
6:15 PM	348	3	2	353	2	4	0	6	44	469	4	517	876
Total	710	5	4	719	3	4	0	7	96	930	10	1036	1762
Grand Total	4776	28	43	4847	29	23	0	52	777	5549	60	6386	11285
Approach %	98.5	0.6	0.9		55.8	44.2	0.0		12.2	86.9	0.9		
Total %	42.3	0.2	0.4	43.0	0.3	0.2	0.0	0.5	6.9	49.2	0.5	56.6	
Exiting Leg Total				5621				805				4859	11285
Cars	4564	27	43	4634	26	23	0	49	769	5280	57	6106	10789
% Cars	95.6	96.4	100.0	95.6	89.7	100.0	0.0	94.2	99.0	95.2	95.0	95.6	95.6
Exiting Leg Total				5349				796				4644	10789
Heavy Vehicles	135	1	0	136	2	0	0	2	6	197	2	205	343
% Heavy Vehicles	2.8	3.6	0.0	2.8	6.9	0.0	0.0	3.8	0.8	3.6	3.3	3.2	3.0
Exiting Leg Total				199				7				137	343
Buses	77	0	0	77	1	0	0	1	2	72	1	75	153
% Buses	1.6	0.0	0.0	1.6	3.4	0.0	0.0	1.9	0.3	1.3	1.7	1.2	1.4
Exiting Leg Total				73				2				78	153

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:15 PM	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:15 PM	430	3	2	435	2	1	0	3	67	471	3	541	979
4:30 PM	412	1	9	422	4	0	0	4	55	430	7	492	918
4:45 PM	426	1	1	428	1	2	0	3	64	476	1	541	972
5:00 PM	406	0	10	416	3	2	0	5	81	460	9	550	971
Total Volume	1674	5	22	1701	10	5	0	15	267	1837	20	2124	3840
% Approach Total	98.4	0.3	1.3		66.7	33.3	0.0		12.6	86.5	0.9		
PHF	0.973	0.417	0.550	0.978	0.625	0.625	0.000	0.750	0.824	0.965	0.556	0.965	0.981
Cars	1602	5	22	1629	9	5	0	14	263	1737	19	2019	3662
Cars %	95.7	100.0	100.0	95.8	90.0	100.0	0.0	93.3	98.5	94.6	95.0	95.1	95.4
Heavy Vehicles	50	0	0	50	0	0	0	0	2	72	1	75	125
Heavy Vehicles %	3.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.7	3.9	5.0	3.5	3.3
Buses	22	0	0	22	1	0	0	1	2	28	0	30	53
Buses %	1.3	0.0	0.0	1.3	10.0	0.0	0.0	6.7	0.7	1.5	0.0	1.4	1.4
Cars Enter Leg	1602	5	22	1629	9	5	0	14	263	1737	19	2019	3662
Heavy Enter Leg	50	0	0	50	0	0	0	0	2	72	1	75	125
Bus Enter Leg	22	0	0	22	1	0	0	1	2	28	0	30	53
Total Entering Leg	1674	5	22	1701	10	5	0	15	267	1837	20	2124	3840



PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
	Cars Exiting Leg	1768				268				1626			
Heavy Exiting Leg	72				2				51				
Buses Exiting Leg	29				2				22				
Total Exiting Leg	1869				272				1699				

PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars

	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	401	1	4	406	1	3	0	4	51	429	9	489	899
3:45 PM	430	1	2	433	1	2	0	3	61	415	4	480	916
Total	831	2	6	839	2	5	0	7	112	844	13	969	1815
4:00 PM	345	3	1	349	4	4	0	8	62	461	4	527	884
4:15 PM	411	3	2	416	1	1	0	2	67	441	3	511	929
4:30 PM	397	1	9	407	4	0	0	4	53	403	6	462	873
4:45 PM	412	1	1	414	1	2	0	3	62	453	1	516	933
Total	1565	8	13	1586	10	7	0	17	244	1758	14	2016	3619
5:00 PM	382	0	10	392	3	2	0	5	81	440	9	530	927
5:15 PM	351	3	4	358	2	1	0	3	70	456	5	531	892
5:30 PM	384	2	1	387	1	2	0	3	82	448	4	534	924
5:45 PM	368	7	5	380	5	2	0	7	86	440	2	528	915
Total	1485	12	20	1517	11	7	0	18	319	1784	20	2123	3658
6:00 PM	350	2	2	354	1	0	0	1	52	448	6	506	861
6:15 PM	333	3	2	338	2	4	0	6	42	446	4	492	836
Total	683	5	4	692	3	4	0	7	94	894	10	998	1697
Grand Total	4564	27	43	4634	26	23	0	49	769	5280	57	6106	10789
Approach %	98.5	0.6	0.9		53.1	46.9	0.0		12.6	86.5	0.9		
Total %	42.3	0.3	0.4	43.0	0.2	0.2	0.0	0.5	7.1	48.9	0.5	56.6	
Exiting Leg Total	5349				796				4644				10789

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:45 PM	412	1	1	414	1	2	0	3	62	453	1	516	933
5:00 PM	382	0	10	392	3	2	0	5	81	440	9	530	927
5:15 PM	351	3	4	358	2	1	0	3	70	456	5	531	892
5:30 PM	384	2	1	387	1	2	0	3	82	448	4	534	924
Total Volume	1529	6	16	1551	7	7	0	14	295	1797	19	2111	3676
% Approach Total	98.6	0.4	1.0		50.0	50.0	0.0		14.0	85.1	0.9		
PHF	0.928	0.500	0.400	0.937	0.583	0.875	0.000	0.700	0.899	0.985	0.528	0.988	0.985
Entering Leg	1529	6	16	1551	7	7	0	14	295	1797	19	2111	3676
Exiting Leg				1820				301				1555	3676
Total				3371				315				3666	7352

PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	Route 1A				Tomasello Drive				Route 1A				
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	18	1	0	19	1	0	0	1	0	21	1	22	42
3:45 PM	11	0	0	11	0	0	0	0	0	25	0	25	36
Total	29	1	0	30	1	0	0	1	0	46	1	47	78
4:00 PM	12	0	0	12	0	0	0	0	0	20	0	20	32
4:15 PM	12	0	0	12	0	0	0	0	0	26	0	26	38
4:30 PM	8	0	0	8	0	0	0	0	1	19	1	21	29
4:45 PM	13	0	0	13	0	0	0	0	1	14	0	15	28
Total	45	0	0	45	0	0	0	0	2	79	1	82	127
5:00 PM	17	0	0	17	0	0	0	0	0	13	0	13	30
5:15 PM	16	0	0	16	0	0	0	0	0	12	0	12	28
5:30 PM	6	0	0	6	0	0	0	0	0	8	0	8	14
5:45 PM	5	0	0	5	1	0	0	1	2	13	0	15	21
Total	44	0	0	44	1	0	0	1	2	46	0	48	93
6:00 PM	6	0	0	6	0	0	0	0	0	7	0	7	13
6:15 PM	11	0	0	11	0	0	0	0	2	19	0	21	32
Total	17	0	0	17	0	0	0	0	2	26	0	28	45
Grand Total	135	1	0	136	2	0	0	2	6	197	2	205	343
Approach %	99.3	0.7	0.0		100.0	0.0	0.0		2.9	96.1	1.0		
Total %	39.4	0.3	0.0	39.7	0.6	0.0	0.0	0.6	1.7	57.4	0.6	59.8	
Exiting Leg Total	199				7				137				343

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	18	1	0	19	1	0	0	1	0	21	1	22	42
3:45 PM	11	0	0	11	0	0	0	0	0	25	0	25	36
4:00 PM	12	0	0	12	0	0	0	0	0	20	0	20	32
4:15 PM	12	0	0	12	0	0	0	0	0	26	0	26	38
Total Volume	53	1	0	54	1	0	0	1	0	92	1	93	148
% Approach Total	98.1	1.9	0.0		100.0	0.0	0.0		0.0	98.9	1.1		
PHF	0.736	0.250	0.000	0.711	0.250	0.000	0.000	0.250	0.000	0.885	0.250	0.894	0.881
Entering Leg	53	1	0	54	1	0	0	1	0	92	1	93	148
Exiting Leg				93				1				54	148
Total				147				2				147	296

PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	Route 1A				Tomasello Drive				Route 1A				
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	9	0	0	9	0	0	0	0	0	5	0	5	14
3:45 PM	8	0	0	8	0	0	0	0	0	6	0	6	14
Total	17	0	0	17	0	0	0	0	0	11	0	11	28
4:00 PM	11	0	0	11	0	0	0	0	0	4	1	5	16
4:15 PM	7	0	0	7	1	0	0	1	0	4	0	4	12
4:30 PM	7	0	0	7	0	0	0	0	1	8	0	9	16
4:45 PM	1	0	0	1	0	0	0	0	1	9	0	10	11
Total	26	0	0	26	1	0	0	1	2	25	1	28	55
5:00 PM	7	0	0	7	0	0	0	0	0	7	0	7	14
5:15 PM	4	0	0	4	0	0	0	0	0	3	0	3	7
5:30 PM	8	0	0	8	0	0	0	0	0	9	0	9	17
5:45 PM	5	0	0	5	0	0	0	0	0	7	0	7	12
Total	24	0	0	24	0	0	0	0	0	26	0	26	50
6:00 PM	6	0	0	6	0	0	0	0	0	6	0	6	12
6:15 PM	4	0	0	4	0	0	0	0	0	4	0	4	8
Total	10	0	0	10	0	0	0	0	0	10	0	10	20
Grand Total	77	0	0	77	1	0	0	1	2	72	1	75	153
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		2.7	96.0	1.3		
Total %	50.3	0.0	0.0	50.3	0.7	0.0	0.0	0.7	1.3	47.1	0.7	49.0	
Exiting Leg Total	73				2				78				153

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:45 PM	Route 1A				Tomasello Drive				Route 1A				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:45 PM	8	0	0	8	0	0	0	0	0	6	0	6	14
4:00 PM	11	0	0	11	0	0	0	0	0	4	1	5	16
4:15 PM	7	0	0	7	1	0	0	1	0	4	0	4	12
4:30 PM	7	0	0	7	0	0	0	0	1	8	0	9	16
Total Volume	33	0	0	33	1	0	0	1	1	22	1	24	58
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		4.2	91.7	4.2		
PHF	0.750	0.000	0.000	0.750	0.250	0.000	0.000	0.250	0.250	0.688	0.250	0.667	0.906
Entering Leg	33	0	0	33	1	0	0	1	1	22	1	24	58
Exiting Leg				23				1				34	58
Total				56				2				58	116

PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



Class: **Bicycles (on Roadway and Crosswalks)**

	Route 1A						Tomasello Drive						Route 1A						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0						0						1						1	

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:30 PM	Route 1A						Tomasello Drive						Route 1A						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.250
Entering Leg	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg						0						0							1	1
Total						1						0							1	2

PDI File #: **175607 (8)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Tomasello Drive**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Pedestrians

	Route 1A						Tomasello Drive						Route 1A						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	3
3:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	2	3	5	0	0	0	0	0	0	5
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	3
6:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	3
Total	0	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	0	0	0	5
Grand Total	0	0	0	0	0	0	0	0	0	0	6	7	13	0	0	0	0	0	0	13
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.2	53.8		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.2	53.8	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0						13						0						13	

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

5:30 PM	Route 1A						Tomasello Drive						Route 1A						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	3
Total Volume	0	0	0	0	0	0	0	0	0	0	4	3	7	0	0	0	0	0	0	7
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.1	42.9		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.583
Entering Leg	0	0	0	0	0	0	0	0	0	0	4	3	7	0	0	0	0	0	0	7
Exiting Leg	0						7						0						7	
Total	0						14						0						14	

PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	506	0	0	506	0	0	0	0	0	1	229	0	0	230	2	3	11	0	16	752
6:45 AM	0	481	0	0	481	0	0	0	0	0	2	251	0	0	253	1	2	16	0	19	753
Total	0	987	0	0	987	0	0	0	0	0	3	480	0	0	483	3	5	27	0	35	1505
7:00 AM	0	452	0	0	452	0	0	0	0	0	5	282	0	0	287	2	1	9	0	12	751
7:15 AM	0	452	0	0	452	0	0	0	0	0	1	301	0	0	302	3	6	10	0	19	773
7:30 AM	0	472	0	0	472	0	0	0	0	0	0	250	0	0	250	0	2	7	0	9	731
7:45 AM	0	492	0	0	492	0	0	0	0	0	2	263	0	1	266	0	3	18	0	21	779
Total	0	1868	0	0	1868	0	0	0	0	0	8	1096	0	1	1105	5	12	44	0	61	3034
8:00 AM	0	484	0	0	484	0	0	0	0	0	2	287	0	1	290	0	3	16	0	19	793
8:15 AM	0	519	0	0	519	0	0	0	0	0	1	306	0	0	307	0	2	11	0	13	839
8:30 AM	0	464	0	0	464	1	0	0	0	1	0	262	0	0	262	1	7	9	0	17	744
8:45 AM	0	503	0	0	503	0	0	0	0	0	0	266	0	0	266	0	2	9	0	11	780
Total	0	1970	0	0	1970	1	0	0	0	1	3	1121	0	1	1125	1	14	45	0	60	3156
9:00 AM	0	430	0	0	430	0	0	0	0	0	1	262	0	0	263	0	9	23	0	32	725
9:15 AM	0	460	0	0	460	0	0	0	0	0	0	287	0	0	287	1	1	16	0	18	765
Total	0	890	0	0	890	0	0	0	0	0	1	549	0	0	550	1	10	39	0	50	1490
Grand Total	0	5715	0	0	5715	1	0	0	0	1	15	3246	0	2	3263	10	41	155	0	206	9185
Approach %	0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.5	99.5	0.0	0.1		4.9	19.9	75.2	0.0		
Total %	0.0	62.2	0.0	0.0	62.2	0.0	0.0	0.0	0.0	0.0	0.2	35.3	0.0	0.0	35.5	0.1	0.4	1.7	0.0	2.2	
Exiting Leg Total	3402					56					5727					0					9185
Cars	0	5389	0	0	5389	1	0	0	0	1	3	2991	0	2	2996	9	5	120	0	134	8520
% Cars	0.0	94.3	0.0	0.0	94.3	100.0	0.0	0.0	0.0	100.0	20.0	92.1	0.0	100.0	91.8	90.0	12.2	77.4	0.0	65.0	92.8
Exiting Leg Total	3112					8					5400					0					8520
Heavy Vehicles	0	263	0	0	263	0	0	0	0	0	12	186	0	0	198	0	36	34	0	70	531
% Heavy Vehicles	0.0	4.6	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	80.0	5.7	0.0	0.0	6.1	0.0	87.8	21.9	0.0	34.0	5.8
Exiting Leg Total	220					48					263					0					531
Buses	0	63	0	0	63	0	0	0	0	0	0	69	0	0	69	1	0	1	0	2	134
% Buses	0.0	1.1	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	2.1	10.0	0.0	0.6	0.0	1.0	1.5
Exiting Leg Total	70					0					64					0					134

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:00 AM	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:00 AM	0	484	0	0	484	0	0	0	0	0	2	287	0	1	290	0	3	16	0	19	793
8:15 AM	0	519	0	0	519	0	0	0	0	0	1	306	0	0	307	0	2	11	0	13	839
8:30 AM	0	464	0	0	464	1	0	0	0	1	0	262	0	0	262	1	7	9	0	17	744
8:45 AM	0	503	0	0	503	0	0	0	0	0	0	266	0	0	266	0	2	9	0	11	780
Total Volume	0	1970	0	0	1970	1	0	0	0	1	3	1121	0	1	1125	1	14	45	0	60	3156
% Approach Total	0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.3	99.6	0.0	0.1		1.7	23.3	75.0	0.0		
PHF	0.000	0.949	0.000	0.000	0.949	0.250	0.000	0.000	0.000	0.250	0.375	0.916	0.000	0.250	0.916	0.250	0.500	0.703	0.000	0.789	0.940
Cars	0	1874	0	0	1874	1	0	0	0	1	0	1029	0	1	1030	1	2	37	0	40	2945
Cars %	0.0	95.1	0.0	0.0	95.1	100.0	0.0	0.0	0.0	100.0	0.0	91.8	0.0	100.0	91.6	100.0	14.3	82.2	0.0	66.7	93.3
Heavy Vehicles	0	70	0	0	70	0	0	0	0	0	3	65	0	0	68	0	12	7	0	19	157
Heavy Vehicles %	0.0	3.6	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	100.0	5.8	0.0	0.0	6.0	0.0	85.7	15.6	0.0	31.7	5.0
Buses	0	26	0	0	26	0	0	0	0	0	0	27	0	0	27	0	0	1	0	1	54
Buses %	0.0	1.3	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	2.4	0.0	0.0	2.2	0.0	1.7	1.7
Cars Enter Leg	0	1874	0	0	1874	1	0	0	0	1	0	1029	0	1	1030	1	2	37	0	40	2945
Heavy Enter Leg	0	70	0	0	70	0	0	0	0	0	3	65	0	0	68	0	12	7	0	19	157
Bus Enter Leg	0	26	0	0	26	0	0	0	0	0	0	27	0	0	27	0	0	1	0	1	54
Total Entering Leg	0	1970	0	0	1970	1	0	0	0	1	3	1121	0	1	1125	1	14	45	0	60	3156
Cars Exiting Leg	1067					2					1876					0					2945

PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



PRECISION  
 D A T A  
 INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

**Cars, Heavy Vehicles, and Buses (Combined)**

	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
	Heavy Exiting Leg	72					15					70					0				
Buses Exiting Leg	28					0					26					54					
Total Exiting Leg	1167					17					1972					0					



PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars

	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	472	0	0	472	0	0	0	0	0	1	215	0	0	216	2	1	5	0	8	696
6:45 AM	0	457	0	0	457	0	0	0	0	0	0	240	0	0	240	1	1	10	0	12	709
Total	0	929	0	0	929	0	0	0	0	0	1	455	0	0	456	3	2	15	0	20	1405
7:00 AM	0	427	0	0	427	0	0	0	0	0	0	261	0	0	261	2	0	8	0	10	698
7:15 AM	0	425	0	0	425	0	0	0	0	0	0	275	0	0	275	2	0	7	0	9	709
7:30 AM	0	445	0	0	445	0	0	0	0	0	0	227	0	0	227	0	0	5	0	5	677
7:45 AM	0	468	0	0	468	0	0	0	0	0	1	248	0	1	250	0	1	15	0	16	734
Total	0	1765	0	0	1765	0	0	0	0	0	1	1011	0	1	1013	4	1	35	0	40	2818
8:00 AM	0	464	0	0	464	0	0	0	0	0	0	266	0	1	267	0	0	14	0	14	745
8:15 AM	0	498	0	0	498	0	0	0	0	0	0	279	0	0	279	0	0	9	0	9	786
8:30 AM	0	435	0	0	435	1	0	0	0	1	0	242	0	0	242	1	2	7	0	10	688
8:45 AM	0	477	0	0	477	0	0	0	0	0	0	242	0	0	242	0	0	7	0	7	726
Total	0	1874	0	0	1874	1	0	0	0	1	0	1029	0	1	1030	1	2	37	0	40	2945
9:00 AM	0	402	0	0	402	0	0	0	0	0	1	239	0	0	240	0	0	19	0	19	661
9:15 AM	0	419	0	0	419	0	0	0	0	0	0	257	0	0	257	1	0	14	0	15	691
Total	0	821	0	0	821	0	0	0	0	0	1	496	0	0	497	1	0	33	0	34	1352
Grand Total	0	5389	0	0	5389	1	0	0	0	1	3	2991	0	2	2996	9	5	120	0	134	8520
Approach %	0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.1	99.8	0.0	0.1		6.7	3.7	89.6	0.0		
Total %	0.0	63.3	0.0	0.0	63.3	0.0	0.0	0.0	0.0	0.0	0.0	35.1	0.0	0.0	35.2	0.1	0.1	1.4	0.0	1.6	
Exiting Leg Total	3112					8					5400					0					8520

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:45 AM	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:45 AM	0	468	0	0	468	0	0	0	0	0	1	248	0	1	250	0	1	15	0	16	734
8:00 AM	0	464	0	0	464	0	0	0	0	0	0	266	0	1	267	0	0	14	0	14	745
8:15 AM	0	498	0	0	498	0	0	0	0	0	0	279	0	0	279	0	0	9	0	9	786
8:30 AM	0	435	0	0	435	1	0	0	0	1	0	242	0	0	242	1	2	7	0	10	688
Total Volume	0	1865	0	0	1865	1	0	0	0	1	1	1035	0	2	1038	1	3	45	0	49	2953
% Approach Total	0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.1	99.7	0.0	0.2		2.0	6.1	91.8	0.0		
PHF	0.000	0.936	0.000	0.000	0.936	0.250	0.000	0.000	0.000	0.250	0.250	0.927	0.000	0.500	0.930	0.250	0.375	0.750	0.000	0.766	0.939
Entering Leg	0	1865	0	0	1865	1	0	0	0	1	1	1035	0	2	1038	1	3	45	0	49	2953
Exiting Leg					1081					4				1868						0	2953
Total					2946					5				2906						49	5906

PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	32	0	0	32	0	0	0	0	0	0	9	0	0	9	0	2	6	0	8	49
6:45 AM	0	21	0	0	21	0	0	0	0	0	2	9	0	0	11	0	1	6	0	7	39
Total	0	53	0	0	53	0	0	0	0	0	2	18	0	0	20	0	3	12	0	15	88
7:00 AM	0	23	0	0	23	0	0	0	0	0	5	13	0	0	18	0	1	1	0	2	43
7:15 AM	0	24	0	0	24	0	0	0	0	0	1	18	0	0	19	0	6	3	0	9	52
7:30 AM	0	23	0	0	23	0	0	0	0	0	0	20	0	0	20	0	2	2	0	4	47
7:45 AM	0	18	0	0	18	0	0	0	0	0	1	10	0	0	11	0	2	3	0	5	34
Total	0	88	0	0	88	0	0	0	0	0	7	61	0	0	68	0	11	9	0	20	176
8:00 AM	0	14	0	0	14	0	0	0	0	0	2	13	0	0	15	0	3	1	0	4	33
8:15 AM	0	14	0	0	14	0	0	0	0	0	1	17	0	0	18	0	2	2	0	4	36
8:30 AM	0	21	0	0	21	0	0	0	0	0	0	17	0	0	17	0	5	2	0	7	45
8:45 AM	0	21	0	0	21	0	0	0	0	0	0	18	0	0	18	0	2	2	0	4	43
Total	0	70	0	0	70	0	0	0	0	0	3	65	0	0	68	0	12	7	0	19	157
9:00 AM	0	22	0	0	22	0	0	0	0	0	0	17	0	0	17	0	9	4	0	13	52
9:15 AM	0	30	0	0	30	0	0	0	0	0	0	25	0	0	25	0	1	2	0	3	58
Total	0	52	0	0	52	0	0	0	0	0	0	42	0	0	42	0	10	6	0	16	110
Grand Total	0	263	0	0	263	0	0	0	0	0	12	186	0	0	198	0	36	34	0	70	531
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		6.1	93.9	0.0	0.0		0.0	51.4	48.6	0.0		
Total %	0.0	49.5	0.0	0.0	49.5	0.0	0.0	0.0	0.0	0.0	2.3	35.0	0.0	0.0	37.3	0.0	6.8	6.4	0.0	13.2	
Exiting Leg Total	220					48					263					0					531

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total	
	North					East					South					West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
8:30 AM	0	21	0	0	21	0	0	0	0	0	0	17	0	0	17	0	5	2	0	7	45	
8:45 AM	0	21	0	0	21	0	0	0	0	0	0	18	0	0	18	0	2	2	0	4	43	
9:00 AM	0	22	0	0	22	0	0	0	0	0	0	17	0	0	17	0	9	4	0	13	52	
9:15 AM	0	30	0	0	30	0	0	0	0	0	0	25	0	0	25	0	1	2	0	3	58	
Total Volume	0	94	0	0	94	0	0	0	0	0	0	77	0	0	77	0	17	10	0	27	198	
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0			0.0	100.0	0.0	0.0		0.0	63.0	37.0	0.0		
PHF	0.000	0.783	0.000	0.000	0.783	0.000	0.000	0.000	0.000	0.000		0.000	0.770	0.000	0.000	0.770	0.000	0.472	0.625	0.000	0.519	0.853
Entering Leg	0	94	0	0	94	0	0	0	0	0		0	77	0	0	77	0	17	10	0	27	198
Exiting Leg	87					17					94					0					198	
Total	181					17					171					27					396	

PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Buses

	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	7
6:45 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
Total	0	5	0	0	5	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	12
7:00 AM	0	2	0	0	2	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	10
7:15 AM	0	3	0	0	3	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	12
7:30 AM	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	7
7:45 AM	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	11
Total	0	15	0	0	15	0	0	0	0	0	0	24	0	0	24	1	0	0	0	1	40
8:00 AM	0	6	0	0	6	0	0	0	0	0	0	8	0	0	8	0	0	1	0	1	15
8:15 AM	0	7	0	0	7	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	17
8:30 AM	0	8	0	0	8	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	11
8:45 AM	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	11
Total	0	26	0	0	26	0	0	0	0	0	0	27	0	0	27	0	0	1	0	1	54
9:00 AM	0	6	0	0	6	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	12
9:15 AM	0	11	0	0	11	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	16
Total	0	17	0	0	17	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	28
Grand Total	0	63	0	0	63	0	0	0	0	0	0	69	0	0	69	1	0	1	0	2	134
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		50.0	0.0	50.0	0.0		
Total %	0.0	47.0	0.0	0.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	51.5	0.0	0.0	51.5	0.7	0.0	0.7	0.0	1.5	
Exiting Leg Total	70					0					64					0					134

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:45 AM	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:45 AM	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	11
8:00 AM	0	6	0	0	6	0	0	0	0	0	0	8	0	0	8	0	0	1	0	1	15
8:15 AM	0	7	0	0	7	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	17
8:30 AM	0	8	0	0	8	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	11
Total Volume	0	27	0	0	27	0	0	0	0	0	0	26	0	0	26	0	0	1	0	1	54
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		
PHF	0.000	0.844	0.000	0.000	0.844	0.000	0.000	0.000	0.000	0.000	0.000	0.650	0.000	0.000	0.650	0.000	0.000	0.250	0.000	0.250	0.794
Entering Leg	0	27	0	0	27	0	0	0	0	0	0	26	0	0	26	0	0	1	0	1	54
Exiting Leg					27					0					27					0	54
Total					54					0					53					1	108

PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



**Bicycles (on Roadway and Crosswalks)**

	Route 1A								Hess Driveway								Route 1A								Jug Handle								Total
	North								East								South								West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total					
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2				
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0						
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0		0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0						
Exiting Leg Total	1							1							0							0							2				

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:30 AM	Route 1A							Hess Driveway							Route 1A							Jug Handle								
	North							East							South							West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250		0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2	
Exiting Leg	1							1							0							0							2	
Total	1							2							1							0							4	

PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Pedestrians

	Route 1A							Hess Driveway							Route 1A							Jug Handle							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	2	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	1	0	1	0	0	0	0	0	0	5	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	
Grand Total	0	0	0	0	0	0	0	0	0	0	3	1	4	4	0	0	0	0	1	0	1	0	0	0	0	1	1	2	7
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	75.0	25.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	50.0	50.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.9	14.3	57.1		0.0	0.0	0.0	0.0	14.3	0.0	14.3	0.0	0.0	0.0	0.0	14.3	14.3	28.6	
Exiting Leg Total	0							4							1							2							7

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:45 AM	Route 1A								Hess Driveway								Route 1A								Jug Handle								Total
	North								East								South								West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total		Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total		Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total		Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	4	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	5	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	75.0	25.0			0.0	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.375	0.250	0.500		0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625		
Entering Leg	0	0	0	0	0	0	0		0	0	0	0	3	1	4	4	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	5	
Exiting Leg	0								4								1								0								5
Total	0								8								2								0								10

PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	440	0	0	440	0	0	0	0	0	1	465	0	0	466	0	0	31	0	31	937
3:45 PM	0	442	0	0	442	0	0	0	0	0	0	451	0	0	451	2	1	30	0	33	926
Total	0	882	0	0	882	0	0	0	0	0	1	916	0	0	917	2	1	61	0	64	1863
4:00 PM	0	379	0	0	379	0	0	0	0	0	0	481	0	0	481	0	5	37	0	42	902
4:15 PM	0	417	0	0	417	0	0	0	0	0	0	478	0	0	478	1	3	29	0	33	928
4:30 PM	0	417	0	0	417	0	0	0	0	0	0	435	0	0	435	2	3	27	0	32	884
4:45 PM	0	423	0	0	423	0	0	0	0	0	0	488	0	0	488	2	4	26	0	32	943
Total	0	1636	0	0	1636	0	0	0	0	0	0	1882	0	0	1882	5	15	119	0	139	3657
5:00 PM	0	394	0	0	394	0	0	0	0	0	0	448	0	0	448	1	0	42	0	43	885
5:15 PM	0	390	0	0	390	0	0	1	0	1	0	484	0	0	484	1	4	35	0	40	915
5:30 PM	1	403	0	1	405	0	0	0	0	0	0	471	0	0	471	1	0	21	0	22	898
5:45 PM	0	381	0	0	381	0	0	0	0	0	1	487	0	0	488	1	0	19	0	20	889
Total	1	1568	0	1	1570	0	0	1	0	1	1	1890	0	0	1891	4	4	117	0	125	3587
6:00 PM	0	374	0	0	374	0	0	0	0	0	3	467	0	0	470	1	0	30	0	31	875
6:15 PM	0	339	0	0	339	0	0	0	0	0	3	479	0	0	482	0	0	20	0	20	841
Total	0	713	0	0	713	0	0	0	0	0	6	946	0	0	952	1	0	50	0	51	1716
Grand Total	1	4799	0	1	4801	0	0	1	0	1	8	5634	0	0	5642	12	20	347	0	379	10823
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		0.1	99.9	0.0	0.0		3.2	5.3	91.6	0.0		
Total %	0.0	44.3	0.0	0.0	44.4	0.0	0.0	0.0	0.0	0.0	0.1	52.1	0.0	0.0	52.1	0.1	0.2	3.2	0.0	3.5	
Exiting Leg Total	5982					28					4812					1					10823
Cars	1	4597	0	1	4599	0	0	1	0	1	2	5361	0	0	5363	12	2	326	0	340	10303
% Cars	100.0	95.8	0.0	100.0	95.8	0.0	0.0	100.0	0.0	100.0	25.0	95.2	0.0	0.0	95.1	100.0	10.0	93.9	0.0	89.7	95.2
Exiting Leg Total	5688					4					4610					1					10303
Heavy Vehicles	0	118	0	0	118	0	0	0	0	0	6	199	0	0	205	0	18	18	0	36	359
% Heavy Vehicles	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	75.0	3.5	0.0	0.0	3.6	0.0	90.0	5.2	0.0	9.5	3.3
Exiting Leg Total	217					24					118					0					359
Buses	0	84	0	0	84	0	0	0	0	0	0	74	0	0	74	0	0	3	0	3	161
% Buses	0.0	1.8	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	1.3	0.0	0.0	0.9	0.0	0.8	1.5
Exiting Leg Total	77					0					84					0					161

### Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	440	0	0	440	0	0	0	0	0	1	465	0	0	466	0	0	31	0	31	937
3:45 PM	0	442	0	0	442	0	0	0	0	0	0	451	0	0	451	2	1	30	0	33	926
4:00 PM	0	379	0	0	379	0	0	0	0	0	0	481	0	0	481	0	5	37	0	42	902
4:15 PM	0	417	0	0	417	0	0	0	0	0	0	478	0	0	478	1	3	29	0	33	928
Total Volume	0	1678	0	0	1678	0	0	0	0	0	1	1875	0	0	1876	3	9	127	0	139	3693
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.1	99.9	0.0	0.0		2.2	6.5	91.4	0.0		
PHF	0.000	0.949	0.000	0.000	0.949	0.000	0.000	0.000	0.000	0.000	0.250	0.975	0.000	0.000	0.975	0.375	0.450	0.858	0.000	0.827	0.985
Cars	0	1596	0	0	1596	0	0	0	0	0	0	1756	0	0	1756	3	0	117	0	120	3472
Cars %	0.0	95.1	0.0	0.0	95.1	0.0	0.0	0.0	0.0	0.0	0.0	93.7	0.0	0.0	93.6	100.0	0.0	92.1	0.0	86.3	94.0
Heavy Vehicles	0	42	0	0	42	0	0	0	0	0	1	97	0	0	98	0	9	9	0	18	158
Heavy Vehicles %	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	100.0	5.2	0.0	0.0	5.2	0.0	100.0	7.1	0.0	12.9	4.3
Buses	0	40	0	0	40	0	0	0	0	0	0	22	0	0	22	0	0	1	0	1	63
Buses %	0.0	2.4	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	1.2	0.0	0.0	0.8	0.0	0.7	1.7
Cars Enter Leg	0	1596	0	0	1596	0	0	0	0	0	0	1756	0	0	1756	3	0	117	0	120	3472
Heavy Enter Leg	0	42	0	0	42	0	0	0	0	0	1	97	0	0	98	0	9	9	0	18	158
Bus Enter Leg	0	40	0	0	40	0	0	0	0	0	0	22	0	0	22	0	0	1	0	1	63
Total Entering Leg	0	1678	0	0	1678	0	0	0	0	0	1	1875	0	0	1876	3	9	127	0	139	3693

PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



**Cars, Heavy Vehicles, and Buses (Combined)**

	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
Cars Exiting Leg	1873					0					1599					0					3472
Heavy Exiting Leg	106					10					42					0					158
Buses Exiting Leg	23					0					40					0					63
Total Exiting Leg	2002					10					1681					0					3693

PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars

	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	413	0	0	413	0	0	0	0	0	0	437	0	0	437	0	0	26	0	26	876
3:45 PM	0	425	0	0	425	0	0	0	0	0	0	420	0	0	420	2	0	30	0	32	877
Total	0	838	0	0	838	0	0	0	0	0	0	857	0	0	857	2	0	56	0	58	1753
4:00 PM	0	357	0	0	357	0	0	0	0	0	0	451	0	0	451	0	0	35	0	35	843
4:15 PM	0	401	0	0	401	0	0	0	0	0	0	448	0	0	448	1	0	26	0	27	876
4:30 PM	0	403	0	0	403	0	0	0	0	0	0	408	0	0	408	2	1	26	0	29	840
4:45 PM	0	405	0	0	405	0	0	0	0	0	0	466	0	0	466	2	0	25	0	27	898
Total	0	1566	0	0	1566	0	0	0	0	0	0	1773	0	0	1773	5	1	112	0	118	3457
5:00 PM	0	372	0	0	372	0	0	0	0	0	0	431	0	0	431	1	0	39	0	40	843
5:15 PM	0	374	0	0	374	0	0	1	0	1	0	469	0	0	469	1	1	33	0	35	879
5:30 PM	1	389	0	1	391	0	0	0	0	0	0	452	0	0	452	1	0	21	0	22	865
5:45 PM	0	369	0	0	369	0	0	0	0	0	0	466	0	0	466	1	0	18	0	19	854
Total	1	1504	0	1	1506	0	0	1	0	1	0	1818	0	0	1818	4	1	111	0	116	3441
6:00 PM	0	362	0	0	362	0	0	0	0	0	0	456	0	0	456	1	0	28	0	29	847
6:15 PM	0	327	0	0	327	0	0	0	0	0	2	457	0	0	459	0	0	19	0	19	805
Total	0	689	0	0	689	0	0	0	0	0	2	913	0	0	915	1	0	47	0	48	1652
Grand Total	1	4597	0	1	4599	0	0	1	0	1	2	5361	0	0	5363	12	2	326	0	340	10303
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		0.0	100.0	0.0	0.0		3.5	0.6	95.9	0.0		
Total %	0.0	44.6	0.0	0.0	44.6	0.0	0.0	0.0	0.0	0.0	0.0	52.0	0.0	0.0	52.1	0.1	0.0	3.2	0.0	3.3	
Exiting Leg Total	5688					4					4610					1					10303

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:45 PM	0	405	0	0	405	0	0	0	0	0	0	466	0	0	466	2	0	25	0	27	898
5:00 PM	0	372	0	0	372	0	0	0	0	0	0	431	0	0	431	1	0	39	0	40	843
5:15 PM	0	374	0	0	374	0	0	1	0	1	0	469	0	0	469	1	1	33	0	35	879
5:30 PM	1	389	0	1	391	0	0	0	0	0	0	452	0	0	452	1	0	21	0	22	865
Total Volume	1	1540	0	1	1542	0	0	1	0	1	0	1818	0	0	1818	5	1	118	0	124	3485
% Approach Total	0.1	99.9	0.0	0.1		0.0	0.0	100.0	0.0		0.0	100.0	0.0	0.0		4.0	0.8	95.2	0.0		
PHF	0.250	0.951	0.000	0.250	0.952	0.000	0.000	0.250	0.000	0.250	0.000	0.969	0.000	0.000	0.969	0.625	0.250	0.756	0.000	0.775	0.970
Entering Leg	1	1540	0	1	1542	0	0	1	0	1	0	1818	0	0	1818	5	1	118	0	124	3485
Exiting Leg	1937					1					1546					1					3485
Total	3479					2					3364					125					6970



PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	15	0	0	15	0	0	0	0	0	1	21	0	0	22	0	0	4	0	4	41
3:45 PM	0	7	0	0	7	0	0	0	0	0	0	26	0	0	26	0	1	0	0	1	34
Total	0	22	0	0	22	0	0	0	0	0	1	47	0	0	48	0	1	4	0	5	75
4:00 PM	0	10	0	0	10	0	0	0	0	0	0	25	0	0	25	0	5	2	0	7	42
4:15 PM	0	10	0	0	10	0	0	0	0	0	0	25	0	0	25	0	3	3	0	6	41
4:30 PM	0	7	0	0	7	0	0	0	0	0	0	20	0	0	20	0	2	1	0	3	30
4:45 PM	0	16	0	0	16	0	0	0	0	0	0	13	0	0	13	0	4	1	0	5	34
Total	0	43	0	0	43	0	0	0	0	0	0	83	0	0	83	0	14	7	0	21	147
5:00 PM	0	17	0	0	17	0	0	0	0	0	0	10	0	0	10	0	0	2	0	2	29
5:15 PM	0	10	0	0	10	0	0	0	0	0	0	12	0	0	12	0	3	2	0	5	27
5:30 PM	0	6	0	0	6	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	16
5:45 PM	0	7	0	0	7	0	0	0	0	0	1	14	0	0	15	0	0	0	0	0	22
Total	0	40	0	0	40	0	0	0	0	0	1	46	0	0	47	0	3	4	0	7	94
6:00 PM	0	5	0	0	5	0	0	0	0	0	3	5	0	0	8	0	0	2	0	2	15
6:15 PM	0	8	0	0	8	0	0	0	0	0	1	18	0	0	19	0	0	1	0	1	28
Total	0	13	0	0	13	0	0	0	0	0	4	23	0	0	27	0	0	3	0	3	43
Grand Total	0	118	0	0	118	0	0	0	0	0	6	199	0	0	205	0	18	18	0	36	359
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		2.9	97.1	0.0	0.0		0.0	50.0	50.0	0.0		
Total %	0.0	32.9	0.0	0.0	32.9	0.0	0.0	0.0	0.0	0.0	1.7	55.4	0.0	0.0	57.1	0.0	5.0	5.0	0.0	10.0	
Exiting Leg Total	217					24					118					0					359

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	15	0	0	15	0	0	0	0	0	1	21	0	0	22	0	0	4	0	4	41
3:45 PM	0	7	0	0	7	0	0	0	0	0	0	26	0	0	26	0	1	0	0	1	34
4:00 PM	0	10	0	0	10	0	0	0	0	0	0	25	0	0	25	0	5	2	0	7	42
4:15 PM	0	10	0	0	10	0	0	0	0	0	0	25	0	0	25	0	3	3	0	6	41
Total Volume	0	42	0	0	42	0	0	0	0	0	1	97	0	0	98	0	9	9	0	18	158
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		1.0	99.0	0.0	0.0		0.0	50.0	50.0	0.0		
PHF	0.000	0.700	0.000	0.000	0.700	0.000	0.000	0.000	0.000	0.000	0.250	0.933	0.000	0.000	0.942	0.000	0.450	0.563	0.000	0.643	0.940
Entering Leg	0	42	0	0	42	0	0	0	0	0	1	97	0	0	98	0	9	9	0	18	158
Exiting Leg	106					10					42					0					158
Total	148					10					140					18					316

PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	12	0	0	12	0	0	0	0	0	0	7	0	0	7	0	0	1	0	1	20
3:45 PM	0	10	0	0	10	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	15
Total	0	22	0	0	22	0	0	0	0	0	0	12	0	0	12	0	0	1	0	1	35
4:00 PM	0	12	0	0	12	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	17
4:15 PM	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	11
4:30 PM	0	7	0	0	7	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	14
4:45 PM	0	2	0	0	2	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	11
Total	0	27	0	0	27	0	0	0	0	0	0	26	0	0	26	0	0	0	0	0	53
5:00 PM	0	5	0	0	5	0	0	0	0	0	0	7	0	0	7	0	0	1	0	1	13
5:15 PM	0	6	0	0	6	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	9
5:30 PM	0	8	0	0	8	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	17
5:45 PM	0	5	0	0	5	0	0	0	0	0	0	7	0	0	7	0	0	1	0	1	13
Total	0	24	0	0	24	0	0	0	0	0	0	26	0	0	26	0	0	2	0	2	52
6:00 PM	0	7	0	0	7	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	13
6:15 PM	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	8
Total	0	11	0	0	11	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	21
Grand Total	0	84	0	0	84	0	0	0	0	0	0	74	0	0	74	0	0	3	0	3	161
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		
Total %	0.0	52.2	0.0	0.0	52.2	0.0	0.0	0.0	0.0	0.0	0.0	46.0	0.0	0.0	46.0	0.0	0.0	1.9	0.0	1.9	
Exiting Leg Total	77					0					84					0					161

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A					Hess Driveway					Route 1A					Jug Handle					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	12	0	0	12	0	0	0	0	0	0	7	0	0	7	0	0	1	0	1	20
3:45 PM	0	10	0	0	10	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	15
4:00 PM	0	12	0	0	12	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	17
4:15 PM	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	11
Total Volume	0	40	0	0	40	0	0	0	0	0	0	22	0	0	22	0	0	1	0	1	63
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		
PHF	0.000	0.833	0.000	0.000	0.833	0.000	0.000	0.000	0.000	0.000	0.000	0.786	0.000	0.000	0.786	0.000	0.000	0.250	0.000	0.250	0.788
Entering Leg	0	40	0	0	40	0	0	0	0	0	0	22	0	0	22	0	0	1	0	1	63
Exiting Leg	23					0					40					0					63
Total	63					0					62					1					126

PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



**Bicycles (on Roadway and Crosswalks)**

	Route 1A							Hess Driveway							Route 1A							Jug Handle							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0							0							0							0							0

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A							Hess Driveway							Route 1A							Jug Handle							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0							0							0							0							0
Total	0							0							0							0							0

PDI File #: **175607 (9)**  
 Location: **N: Route 1A S: Route 1A**  
 Location: **E: Hess Driveway W: Jug Handle**  
 City, State: **Boston, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Pedestrians

	Route 1A							Hess Driveway							Route 1A							Jug Handle							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	2	4	0	0	0	0	1	0	1	0	0	0	0	1	0	1	6
3:45 PM	0	0	0	0	0	1	1	0	0	0	0	1	2	3	0	0	0	0	0	1	1	0	0	0	0	0	1	1	6
Total	0	0	0	0	0	1	1	0	0	0	0	3	4	7	0	0	0	0	1	1	2	0	0	0	0	1	1	2	12
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	1	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 PM	0	0	0	0	0	0	0	0	0	0	2	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	0	0	0	0	0	0	0	0	3	3	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Grand Total	0	0	0	0	0	1	1	0	0	0	0	6	9	15	0	0	0	0	1	1	2	0	0	0	0	1	2	3	21
Approach %	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	40.0	60.0		0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	33.3	66.7		
Total %	0.0	0.0	0.0	0.0	0.0	4.8	4.8	0.0	0.0	0.0	0.0	28.6	42.9	71.4	0.0	0.0	0.0	0.0	4.8	4.8	9.5	0.0	0.0	0.0	0.0	4.8	9.5	14.3	
Exiting Leg Total	1							15							2							3							21

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Route 1A							Hess Driveway							Route 1A							Jug Handle							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	2	4	0	0	0	0	1	0	1	0	0	0	0	1	0	1	6
3:45 PM	0	0	0	0	0	1	1	0	0	0	0	1	2	3	0	0	0	0	0	1	1	0	0	0	0	0	1	1	6
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	1	0	0	0	0	3	5	8	0	0	0	0	1	1	2	0	0	0	0	1	1	2	13
% Approach Total	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	37.5	62.5		0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	50.0	50.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.375	0.625	0.500	0.000	0.000	0.000	0.000	0.250	0.250	0.500	0.000	0.000	0.000	0.000	0.250	0.250	0.500	0.542
Entering Leg	0	0	0	0	0	1	1	0	0	0	0	3	5	8	0	0	0	0	1	1	2	0	0	0	0	1	1	2	13
Exiting Leg	1							8							2							2							13
Total	2							16							4							4							26

PDI File #: 175607 (11)

Location: S: Route 1 SB Onramp

Location: E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp

City, State: Revere, MA

Client: VHB/ A. Berthaume

Site Code: 13796.00

Count Date: Tuesday, May 09, 2017

Start Time: 6:30 AM

End Time: 9:30 AM

Class:

## Cars, Heavy Vehicles, and Buses (Combined)



PRECISION  
DATA  
INDUSTRIES LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdiinc.com

	Winthrop Avenue (Route 145)				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145)				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
6:30 AM	287	95	10	392	8	0	8	0	0	0	0	0	46	167	0	213	613
6:45 AM	251	77	7	335	11	0	11	0	0	0	0	0	56	185	0	241	587
Total	538	172	17	727	19	0	19	0	0	0	0	0	102	352	0	454	1200
7:00 AM	278	71	3	352	12	0	12	0	0	0	0	0	42	223	0	265	629
7:15 AM	338	69	9	416	15	0	15	0	1	0	0	1	37	297	1	335	767
7:30 AM	322	75	7	404	16	0	16	0	0	0	0	0	49	238	0	287	707
7:45 AM	342	53	7	402	16	0	16	0	0	0	0	0	56	265	0	321	739
Total	1280	268	26	1574	59	0	59	0	1	0	0	1	184	1023	1	1208	2842
8:00 AM	343	84	5	432	6	0	6	0	0	0	0	0	93	247	0	340	778
8:15 AM	282	91	4	377	15	0	15	0	0	0	0	0	103	226	0	329	721
8:30 AM	273	67	7	347	14	0	14	0	0	0	0	0	84	248	0	332	693
8:45 AM	230	48	6	284	13	0	13	0	0	0	0	0	60	208	0	268	565
Total	1128	290	22	1440	48	0	48	0	0	0	0	0	340	929	0	1269	2757
9:00 AM	217	41	9	267	11	0	11	0	0	1	0	1	78	169	0	247	526
9:15 AM	215	53	8	276	13	0	13	0	1	0	0	1	60	171	0	231	521
Total	432	94	17	543	24	0	24	0	1	1	0	2	138	340	0	478	1047
Grand Total	3378	824	82	4284	150	0	150	0	2	1	0	3	764	2644	1	3409	7846
Approach %	78.9	19.2	1.9		100.0	0.0		0.0	66.7	33.3	0.0		22.4	77.6	0.0		
Total %	43.1	10.5	1.0	54.6	1.9	0.0	1.9	0.0	0.0	0.0	0.0	0.0	9.7	33.7	0.0	43.4	
Exiting Leg Total				2728			0					1738				3380	7846
Cars	3283	812	79	4174	115	0	115	0	2	1	0	3	720	2552	1	3273	7565
% Cars	97.2	98.5	96.3	97.4	76.7	0.0	76.7	0.0	100.0	100.0	0.0	100.0	94.2	96.5	100.0	96.0	96.4
Exiting Leg Total				2633			0					1647				3285	7565
Heavy Vehicles	49	8	0	57	28	0	28	0	0	0	0	0	38	61	0	99	184
% Heavy Vehicles	1.5	1.0	0.0	1.3	18.7	0.0	18.7	0.0	0.0	0.0	0.0	0.0	5.0	2.3	0.0	2.9	2.3
Exiting Leg Total				61			0					74				49	184
Buses	46	4	3	53	7	0	7	0	0	0	0	0	6	31	0	37	97
% Buses	1.4	0.5	3.7	1.2	4.7	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.8	1.2	0.0	1.1	1.2
Exiting Leg Total				34			0					17				46	97

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

	Winthrop Avenue (Route 145)				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145)				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:15 AM	338	69	9	416	15	0	15	0	1	0	0	1	37	297	1	335	767
7:30 AM	322	75	7	404	16	0	16	0	0	0	0	0	49	238	0	287	707
7:45 AM	342	53	7	402	16	0	16	0	0	0	0	0	56	265	0	321	739
8:00 AM	343	84	5	432	6	0	6	0	0	0	0	0	93	247	0	340	778
Total Volume	1345	281	28	1654	53	0	53	0	1	0	0	1	235	1047	1	1283	2991
% Approach Total	81.3	17.0	1.7		100.0	0.0		0.0	100.0	0.0	0.0		18.3	81.6	0.1		
PHF	0.980	0.836	0.778	0.957	0.828	0.000	0.828	0.000	0.250	0.000	0.000	0.250	0.632	0.881	0.250	0.943	0.961
Cars	1309	276	27	1612	39	0	39	0	1	0	0	1	220	1013	1	1234	2886
Cars %	97.3	98.2	96.4	97.5	73.6	0.0	73.6	0.0	100.0	0.0	0.0	100.0	93.6	96.8	100.0	96.2	96.5
Heavy Vehicles	17	3	0	20	12	0	12	0	0	0	0	0	14	23	0	37	69
Heavy Vehicles %	1.3	1.1	0.0	1.2	22.6	0.0	22.6	0.0	0.0	0.0	0.0	0.0	6.0	2.2	0.0	2.9	2.3
Buses	19	2	1	22	2	0	2	0	0	0	0	0	1	11	0	12	36
Buses %	1.4	0.7	3.6	1.3	3.8	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.4	1.1	0.0	0.9	1.2
Cars Enter Leg	1309	276	27	1612	39	0	39	0	1	0	0	1	220	1013	1	1234	2886
Heavy Enter Leg	17	3	0	20	12	0	12	0	0	0	0	0	14	23	0	37	69
Bus Enter Leg	19	2	1	22	2	0	2	0	0	0	0	0	1	11	0	12	36
Total Entering Leg	1345	281	28	1654	53	0	53	0	1	0	0	1	235	1047	1	1283	2991
Cars Exiting Leg				1041			0					535				1310	2886

PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthaume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **6:30 AM**

End Time: **9:30 AM**

Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp						Winthrop Avenue (Route 145				Total
	East				Southeast			South						West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
Heavy Exiting Leg	23				0			29						17				69
Buses Exiting Leg	12				0			5						19				36
Total Exiting Leg	1076				0			569						1346				2991



PRECISION  
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INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdilic.com

PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthaume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **6:30 AM**

End Time: **9:30 AM**

Class:



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### Cars

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
6:30 AM	281	92	10	383	6	0	6	0	0	0	0	0	45	162	0	207	596
6:45 AM	250	77	7	334	6	0	6	0	0	0	0	0	55	181	0	236	576
Total	531	169	17	717	12	0	12	0	0	0	0	0	100	343	0	443	1172
7:00 AM	264	71	3	338	11	0	11	0	0	0	0	0	38	216	0	254	603
7:15 AM	325	69	9	403	6	0	6	0	1	0	0	1	35	284	1	320	730
7:30 AM	312	73	7	392	14	0	14	0	0	0	0	0	46	233	0	279	685
7:45 AM	334	51	6	391	13	0	13	0	0	0	0	0	52	256	0	308	712
Total	1235	264	25	1524	44	0	44	0	1	0	0	1	171	989	1	1161	2730
8:00 AM	338	83	5	426	6	0	6	0	0	0	0	0	87	240	0	327	759
8:15 AM	274	91	4	369	11	0	11	0	0	0	0	0	95	216	0	311	691
8:30 AM	262	66	7	335	12	0	12	0	0	0	0	0	81	240	0	321	668
8:45 AM	224	46	5	275	9	0	9	0	0	0	0	0	59	198	0	257	541
Total	1098	286	21	1405	38	0	38	0	0	0	0	0	322	894	0	1216	2659
9:00 AM	212	40	8	260	10	0	10	0	0	1	0	1	72	162	0	234	505
9:15 AM	207	53	8	268	11	0	11	0	1	0	0	1	55	164	0	219	499
Total	419	93	16	528	21	0	21	0	1	1	0	2	127	326	0	453	1004
Grand Total	3283	812	79	4174	115	0	115	0	2	1	0	3	720	2552	1	3273	7565
Approach %	78.7	19.5	1.9		100.0	0.0		0.0	66.7	33.3	0.0		22.0	78.0	0.0		
Total %	43.4	10.7	1.0	55.2	1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	9.5	33.7	0.0	43.3	
Exiting Leg Total	2633				0			1647					3285				7565

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:15 AM	325	69	9	403	6	0	6	0	1	0	0	1	35	284	1	320	730
7:30 AM	312	73	7	392	14	0	14	0	0	0	0	0	46	233	0	279	685
7:45 AM	334	51	6	391	13	0	13	0	0	0	0	0	52	256	0	308	712
8:00 AM	338	83	5	426	6	0	6	0	0	0	0	0	87	240	0	327	759
Total Volume	1309	276	27	1612	39	0	39	0	1	0	0	1	220	1013	1	1234	2886
% Approach Total	81.2	17.1	1.7		100.0	0.0		0.0	100.0	0.0	0.0		17.8	82.1	0.1		
PHF	0.968	0.831	0.750	0.946	0.696	0.000	0.696	0.000	0.250	0.000	0.000	0.250	0.632	0.892	0.250	0.943	0.951
Entering Leg	1309	276	27	1612	39	0	39	0	1	0	0	1	220	1013	1	1234	2886
Exiting Leg	1041				0			535					1310				2886
Total	2653				39			536					2544				5772

PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthaume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **6:30 AM**

End Time: **9:30 AM**

Class:



PRECISION  
DATA  
INDUSTRIES LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdiinc.com

### Heavy Vehicles

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
6:30 AM	3	3	0	6	2	0	2	0	0	0	0	0	1	4	0	5	13
6:45 AM	0	0	0	0	3	0	3	0	0	0	0	0	1	2	0	3	6
Total	3	3	0	6	5	0	5	0	0	0	0	0	2	6	0	8	19
7:00 AM	3	0	0	3	1	0	1	0	0	0	0	0	4	3	0	7	11
7:15 AM	4	0	0	4	8	0	8	0	0	0	0	0	2	8	0	10	22
7:30 AM	7	2	0	9	1	0	1	0	0	0	0	0	3	3	0	6	16
7:45 AM	2	0	0	2	3	0	3	0	0	0	0	0	4	6	0	10	15
Total	16	2	0	18	13	0	13	0	0	0	0	0	13	20	0	33	64
8:00 AM	4	1	0	5	0	0	0	0	0	0	0	0	5	6	0	11	16
8:15 AM	4	0	0	4	2	0	2	0	0	0	0	0	6	6	0	12	18
8:30 AM	7	0	0	7	1	0	1	0	0	0	0	0	2	4	0	6	14
8:45 AM	5	1	0	6	4	0	4	0	0	0	0	0	1	8	0	9	19
Total	20	2	0	22	7	0	7	0	0	0	0	0	14	24	0	38	67
9:00 AM	4	1	0	5	1	0	1	0	0	0	0	0	5	5	0	10	16
9:15 AM	6	0	0	6	2	0	2	0	0	0	0	0	4	6	0	10	18
Total	10	1	0	11	3	0	3	0	0	0	0	0	9	11	0	20	34
Grand Total	49	8	0	57	28	0	28	0	0	0	0	0	38	61	0	99	184
Approach %	86.0	14.0	0.0		100.0	0.0		0.0	0.0	0.0	0.0		38.4	61.6	0.0		
Total %	26.6	4.3	0.0	31.0	15.2	0.0	15.2	0.0	0.0	0.0	0.0	0.0	20.7	33.2	0.0	53.8	
Exiting Leg Total				61			0					74				49	184

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:15 AM	4	0	0	4	8	0	8	0	0	0	0	0	2	8	0	10	22
7:30 AM	7	2	0	9	1	0	1	0	0	0	0	0	3	3	0	6	16
7:45 AM	2	0	0	2	3	0	3	0	0	0	0	0	4	6	0	10	15
8:00 AM	4	1	0	5	0	0	0	0	0	0	0	0	5	6	0	11	16
Total Volume	17	3	0	20	12	0	12	0	0	0	0	0	14	23	0	37	69
% Approach Total	85.0	15.0	0.0		100.0	0.0		0.0	0.0	0.0	0.0		37.8	62.2	0.0		
PHF	0.607	0.375	0.000	0.556	0.375	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.700	0.719	0.000	0.841	0.784
Entering Leg	17	3	0	20	12	0	12	0	0	0	0	0	14	23	0	37	69
Exiting Leg				23			0					29				17	69
Total				43			12					29				54	138



PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthaume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **6:30 AM**

End Time: **9:30 AM**

Class:



PRECISION  
D A T A  
INDUSTRIES LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdiinc.com

### Buses

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
6:30 AM	3	0	0	3	0	0	0	0	0	0	0	0	0	1	0	1	4
6:45 AM	1	0	0	1	2	0	2	0	0	0	0	0	0	2	0	2	5
Total	4	0	0	4	2	0	2	0	0	0	0	0	0	3	0	3	9
7:00 AM	11	0	0	11	0	0	0	0	0	0	0	0	0	4	0	4	15
7:15 AM	9	0	0	9	1	0	1	0	0	0	0	0	0	5	0	5	15
7:30 AM	3	0	0	3	1	0	1	0	0	0	0	0	0	2	0	2	6
7:45 AM	6	2	1	9	0	0	0	0	0	0	0	0	0	3	0	3	12
Total	29	2	1	32	2	0	2	0	0	0	0	0	0	14	0	14	48
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1	1	0	2	3
8:15 AM	4	0	0	4	2	0	2	0	0	0	0	0	2	4	0	6	12
8:30 AM	4	1	0	5	1	0	1	0	0	0	0	0	1	4	0	5	11
8:45 AM	1	1	1	3	0	0	0	0	0	0	0	0	0	2	0	2	5
Total	10	2	1	13	3	0	3	0	0	0	0	0	4	11	0	15	31
9:00 AM	1	0	1	2	0	0	0	0	0	0	0	0	1	2	0	3	5
9:15 AM	2	0	0	2	0	0	0	0	0	0	0	0	1	1	0	2	4
Total	3	0	1	4	0	0	0	0	0	0	0	0	2	3	0	5	9
Grand Total	46	4	3	53	7	0	7	0	0	0	0	0	6	31	0	37	97
Approach %	86.8	7.5	5.7		100.0	0.0		0.0	0.0	0.0	0.0		16.2	83.8	0.0		
Total %	47.4	4.1	3.1	54.6	7.2	0.0	7.2	0.0	0.0	0.0	0.0	0.0	6.2	32.0	0.0	38.1	
Exiting Leg Total	34				0			17					46				97

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	11	0	0	11	0	0	0	0	0	0	0	0	0	4	0	4	15
7:15 AM	9	0	0	9	1	0	1	0	0	0	0	0	0	5	0	5	15
7:30 AM	3	0	0	3	1	0	1	0	0	0	0	0	0	2	0	2	6
7:45 AM	6	2	1	9	0	0	0	0	0	0	0	0	0	3	0	3	12
Total Volume	29	2	1	32	2	0	2	0	0	0	0	0	0	14	0	14	48
% Approach Total	90.6	6.3	3.1		100.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.659	0.250	0.250	0.727	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.700	0.000	0.700	0.800
Entering Leg	29	2	1	32	2	0	2	0	0	0	0	0	0	14	0	14	48
Exiting Leg	15				0			4					29				48
Total	47				2			4					43				96

PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **6:30 AM**

End Time: **9:30 AM**

Class:



PRECISION  
D A T A  
INDUSTRIES LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdiinc.com

### Bicycles (on Roadway and Crosswalks)

	Winthrop Avenue (Route 145)						Route 1 NB UTurn Ramp					Route 1 SB Onramp								Winthrop Avenue (Route 145)						Total
	East						Southeast					South								West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Hard Left	U-Turn	CW-SWB	CW-NEB	Total	Hard Right	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total		
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	3
8:00 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	5
Approach %	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0			
Total %	60.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0						0					2								3						5

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:30 AM	Winthrop Avenue (Route 145)						Route 1 NB UTurn Ramp						Route 1 SB Onramp								Winthrop Avenue (Route 145)						Total
	East						Southeast						South								West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Hard Left	U-Turn	CW-SWB	CW-NEB	Total	Hard Right	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total			
7:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:45 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:00 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	
Total Volume	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	4	
% Approach Total	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0				
PHF	0.750	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000		1.000	
Entering Leg	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	4	
Exiting Leg						0					0							1							3	4	
Total						3					0						2							3		8	

PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthaume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **6:30 AM**

End Time: **9:30 AM**

Class:



PRECISION  
DATA  
INDUSTRIES LLC  
46 Morton Street, Framingham, MA 01702  
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### Pedestrians

	Winthrop Avenue (Route 145)						Route 1 NB UTurn Ramp					Route 1 SB Onramp								Winthrop Avenue (Route 145)						Total
	East						Southeast					South								West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Hard Left	U-Turn	CW-SWB	CW-NEB	Total	Hard Right	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total		
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	4
Total	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	0	0	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	0	0	0	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	6	0	0	0	0	0	0	0	6
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	2
Grand Total	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	5	8	13	0	0	0	0	0	0	0	15
Approach %	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	38.5	61.5		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	13.3	0.0	13.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	53.3	86.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	2						0					13								0						15

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:15 AM	Winthrop Avenue (Route 145)						Route 1 NB UTurn Ramp						Route 1 SB Onramp								Winthrop Avenue (Route 145)						Total
	East						Southeast						South								West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Hard Left	U-Turn	CW-SWB	CW-NEB	Total	Hard Right	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total			
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	
7:45 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	4	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	0	0	0	0	0	0	0	4	
Total Volume	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2	5	7	0	0	0	0	0	0	0	9	
% Approach Total	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	28.6	71.4		0.0	0.0	0.0	0.0	0.0				
PHF	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.625	0.438	0.000	0.000	0.000	0.000	0.000	0.000		0.563	
Entering Leg	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2	5	7	0	0	0	0	0	0	0	9	
Exiting Leg	2						0						7								0						9
Total	4						0						14								0						18

PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthaume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **3:30 PM**

End Time: **6:30 PM**

Class:



46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdiinc.com

### Cars, Heavy Vehicles, and Buses (Combined)

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				Total
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	341	72	4	417	38	0	38	0	0	0	0	0	51	272	0	323	778
3:45 PM	287	61	3	351	25	0	25	0	0	0	0	0	44	298	0	342	718
Total	628	133	7	768	63	0	63	0	0	0	0	0	95	570	0	665	1496
4:00 PM	368	55	4	427	30	0	30	0	0	0	0	0	59	331	0	390	847
4:15 PM	325	48	7	380	32	0	32	0	0	0	0	0	64	326	0	390	802
4:30 PM	276	55	7	338	27	0	27	0	0	0	0	0	50	328	0	378	743
4:45 PM	317	66	4	387	26	0	26	0	0	0	0	0	49	344	0	393	806
Total	1286	224	22	1532	115	0	115	0	0	0	0	0	222	1329	0	1551	3198
5:00 PM	372	55	7	434	26	0	26	0	0	0	0	0	46	364	0	410	870
5:15 PM	355	53	5	413	35	0	35	0	0	0	0	0	31	308	0	339	787
5:30 PM	340	63	13	416	24	0	24	0	0	0	0	0	52	333	0	385	825
5:45 PM	344	52	7	403	32	0	32	0	0	0	0	0	52	277	0	329	764
Total	1411	223	32	1666	117	0	117	0	0	0	0	0	181	1282	0	1463	3246
6:00 PM	296	44	2	342	35	0	35	0	0	0	0	0	48	314	0	362	739
6:15 PM	271	46	4	321	22	0	22	0	0	0	0	0	43	268	0	311	654
Total	567	90	6	663	57	0	57	0	0	0	0	0	91	582	0	673	1393
Grand Total	3892	670	67	4629	352	0	352	0	0	0	0	0	589	3763	0	4352	9333
Approach %	84.1	14.5	1.4		100.0	0.0		0.0	0.0	0.0	0.0		13.5	86.5	0.0		
Total %	41.7	7.2	0.7	49.6	3.8	0.0	3.8	0.0	0.0	0.0	0.0	0.0	6.3	40.3	0.0	46.6	
Exiting Leg Total	3830				0			1611					3892				9333
Cars	3838	629	66	4533	290	0	290	0	0	0	0	0	541	3721	0	4262	9085
% Cars	98.6	93.9	98.5	97.9	82.4	0.0	82.4	0.0	0.0	0.0	0.0	0.0	91.9	98.9	0.0	97.9	97.3
Exiting Leg Total	3787				0			1460					3838				9085
Heavy Vehicles	32	37	1	70	46	0	46	0	0	0	0	0	45	25	0	70	186
% Heavy Vehicles	0.8	5.5	1.5	1.5	13.1	0.0	13.1	0.0	0.0	0.0	0.0	0.0	7.6	0.7	0.0	1.6	2.0
Exiting Leg Total	26				0			128					32				186
Buses	22	4	0	26	16	0	16	0	0	0	0	0	3	17	0	20	62
% Buses	0.6	0.6	0.0	0.6	4.5	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.5	0.7
Exiting Leg Total	17				0			23					22				62

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp						Winthrop Avenue (Route 145				Total
	East				Southeast			South						West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
4:45 PM	317	66	4	387	26	0	26	0	0	0	0	0	49	344	0	393	806	
5:00 PM	372	55	7	434	26	0	26	0	0	0	0	0	46	364	0	410	870	
5:15 PM	355	53	5	413	35	0	35	0	0	0	0	0	31	308	0	339	787	
5:30 PM	340	63	13	416	24	0	24	0	0	0	0	0	52	333	0	385	825	
Total Volume	1384	237	29	1650	111	0	111	0	0	0	0	0	178	1349	0	1527	3288	
% Approach Total	83.9	14.4	1.8		100.0	0.0		0.0	0.0	0.0	0.0		11.7	88.3	0.0			
PHF	0.930	0.898	0.558	0.950	0.793	0.000	0.793	0.000	0.000	0.000	0.000	0.000	0.856	0.927	0.000	0.931	0.945	
Cars	1374	216	28	1618	92	0	92	0	0	0	0	0	171	1339	0	1510	3220	
Cars %	99.3	91.1	96.6	98.1	82.9	0.0	82.9	0.0	0.0	0.0	0.0	0.0	96.1	99.3	0.0	98.9	97.9	
Heavy Vehicles	7	20	1	28	13	0	13	0	0	0	0	0	7	8	0	15	56	
Heavy Vehicles %	0.5	8.4	3.4	1.7	11.7	0.0	11.7	0.0	0.0	0.0	0.0	0.0	3.9	0.6	0.0	1.0	1.7	
Buses	3	1	0	4	6	0	6	0	0	0	0	0	0	2	0	2	12	
Buses %	0.2	0.4	0.0	0.2	5.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.4	
Cars Enter Leg	1374	216	28	1618	92	0	92	0	0	0	0	0	171	1339	0	1510	3220	
Heavy Enter Leg	7	20	1	28	13	0	13	0	0	0	0	0	7	8	0	15	56	
Bus Enter Leg	3	1	0	4	6	0	6	0	0	0	0	0	0	2	0	2	12	
Total Entering Leg	1384	237	29	1650	111	0	111	0	0	0	0	0	178	1349	0	1527	3288	

PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthaume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **3:30 PM**

End Time: **6:30 PM**

Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp						Winthrop Avenue (Route 145				Total
	East				Southeast			South						West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
	Cars Exiting Leg	1367				0			479						1374			
Heavy Exiting Leg	9				0			40						7				56
Buses Exiting Leg	2				0			7						3				12
Total Exiting Leg	1378				0			526						1384				3288



46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdilic.com

PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthaume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **3:30 PM**

End Time: **6:30 PM**

Class:



46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdiinc.com

**Cars**

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
3:30 PM	333	68	4	405	35	0	35	0	0	0	0	0	46	266	0	312	752
3:45 PM	282	54	3	339	23	0	23	0	0	0	0	0	38	292	0	330	692
Total	615	122	7	744	58	0	58	0	0	0	0	0	84	558	0	642	1444
4:00 PM	356	54	4	414	25	0	25	0	0	0	0	0	53	327	0	380	819
4:15 PM	321	47	7	375	25	0	25	0	0	0	0	0	60	323	0	383	783
4:30 PM	272	51	7	330	18	0	18	0	0	0	0	0	45	323	0	368	716
4:45 PM	316	58	4	378	19	0	19	0	0	0	0	0	47	340	0	387	784
Total	1265	210	22	1497	87	0	87	0	0	0	0	0	205	1313	0	1518	3102
5:00 PM	367	48	7	422	23	0	23	0	0	0	0	0	45	362	0	407	852
5:15 PM	353	49	5	407	31	0	31	0	0	0	0	0	29	307	0	336	774
5:30 PM	338	61	12	411	19	0	19	0	0	0	0	0	50	330	0	380	810
5:45 PM	338	49	7	394	25	0	25	0	0	0	0	0	48	272	0	320	739
Total	1396	207	31	1634	98	0	98	0	0	0	0	0	172	1271	0	1443	3175
6:00 PM	295	44	2	341	32	0	32	0	0	0	0	0	41	314	0	355	728
6:15 PM	267	46	4	317	15	0	15	0	0	0	0	0	39	265	0	304	636
Total	562	90	6	658	47	0	47	0	0	0	0	0	80	579	0	659	1364
Grand Total	3838	629	66	4533	290	0	290	0	0	0	0	0	541	3721	0	4262	9085
Approach %	84.7	13.9	1.5		100.0	0.0		0.0	0.0	0.0	0.0		12.7	87.3	0.0		
Total %	42.2	6.9	0.7	49.9	3.2	0.0	3.2	0.0	0.0	0.0	0.0	0.0	6.0	41.0	0.0	46.9	
Exiting Leg Total	3787				0			1460					3838				9085

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:45 PM	316	58	4	378	19	0	19	0	0	0	0	0	47	340	0	387	784
5:00 PM	367	48	7	422	23	0	23	0	0	0	0	0	45	362	0	407	852
5:15 PM	353	49	5	407	31	0	31	0	0	0	0	0	29	307	0	336	774
5:30 PM	338	61	12	411	19	0	19	0	0	0	0	0	50	330	0	380	810
Total Volume	1374	216	28	1618	92	0	92	0	0	0	0	0	171	1339	0	1510	3220
% Approach Total	84.9	13.3	1.7		100.0	0.0		0.0	0.0	0.0	0.0		11.3	88.7	0.0		
PHF	0.936	0.885	0.583	0.959	0.742	0.000	0.742	0.000	0.000	0.000	0.000	0.000	0.855	0.925	0.000	0.928	0.945
Entering Leg	1374	216	28	1618	92	0	92	0	0	0	0	0	171	1339	0	1510	3220
Exiting Leg	1367				0			479					1374				3220
Total	2985				92			479					2884				6440

PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthaume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **3:30 PM**

End Time: **6:30 PM**

Class:



### Heavy Vehicles

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
3:30 PM	4	3	0	7	2	0	2	0	0	0	0	0	5	2	0	7	16
3:45 PM	5	6	0	11	1	0	1	0	0	0	0	0	6	3	0	9	21
Total	9	9	0	18	3	0	3	0	0	0	0	0	11	5	0	16	37
4:00 PM	3	1	0	4	5	0	5	0	0	0	0	0	4	3	0	7	16
4:15 PM	1	1	0	2	6	0	6	0	0	0	0	0	4	2	0	6	14
4:30 PM	2	4	0	6	7	0	7	0	0	0	0	0	5	3	0	8	21
4:45 PM	1	8	0	9	5	0	5	0	0	0	0	0	2	3	0	5	19
Total	7	14	0	21	23	0	23	0	0	0	0	0	15	11	0	26	70
5:00 PM	3	6	0	9	3	0	3	0	0	0	0	0	1	2	0	3	15
5:15 PM	2	4	0	6	3	0	3	0	0	0	0	0	2	0	0	2	11
5:30 PM	1	2	1	4	2	0	2	0	0	0	0	0	2	3	0	5	11
5:45 PM	6	2	0	8	5	0	5	0	0	0	0	0	3	3	0	6	19
Total	12	14	1	27	13	0	13	0	0	0	0	0	8	8	0	16	56
6:00 PM	1	0	0	1	2	0	2	0	0	0	0	0	7	0	0	7	10
6:15 PM	3	0	0	3	5	0	5	0	0	0	0	0	4	1	0	5	13
Total	4	0	0	4	7	0	7	0	0	0	0	0	11	1	0	12	23
Grand Total	32	37	1	70	46	0	46	0	0	0	0	0	45	25	0	70	186
Approach %	45.7	52.9	1.4		100.0	0.0		0.0	0.0	0.0	0.0		64.3	35.7	0.0		
Total %	17.2	19.9	0.5	37.6	24.7	0.0	24.7	0.0	0.0	0.0	0.0	0.0	24.2	13.4	0.0	37.6	
Exiting Leg Total	26				0			128					32				186

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
3:45 PM	5	6	0	11	1	0	1	0	0	0	0	0	6	3	0	9	21
4:00 PM	3	1	0	4	5	0	5	0	0	0	0	0	4	3	0	7	16
4:15 PM	1	1	0	2	6	0	6	0	0	0	0	0	4	2	0	6	14
4:30 PM	2	4	0	6	7	0	7	0	0	0	0	0	5	3	0	8	21
Total Volume	11	12	0	23	19	0	19	0	0	0	0	0	19	11	0	30	72
% Approach Total	47.8	52.2	0.0		100.0	0.0		0.0	0.0	0.0	0.0		63.3	36.7	0.0		
PHF	0.550	0.500	0.000	0.523	0.679	0.000	0.679	0.000	0.000	0.000	0.000	0.000	0.792	0.917	0.000	0.833	0.857
Entering Leg	11	12	0	23	19	0	19	0	0	0	0	0	19	11	0	30	72
Exiting Leg	11				0			50					11				72
Total	34				19			50					41				144

PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthaume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **3:30 PM**

End Time: **6:30 PM**

Class:



PRECISION  
D A T A  
INDUSTRIES LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdiinc.com

### Buses

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
3:30 PM	4	1	0	5	1	0	1	0	0	0	0	0	0	4	0	4	10
3:45 PM	0	1	0	1	1	0	1	0	0	0	0	0	0	3	0	3	5
Total	4	2	0	6	2	0	2	0	0	0	0	0	0	7	0	7	15
4:00 PM	9	0	0	9	0	0	0	0	0	0	0	0	2	1	0	3	12
4:15 PM	3	0	0	3	1	0	1	0	0	0	0	0	0	1	0	1	5
4:30 PM	2	0	0	2	2	0	2	0	0	0	0	0	0	2	0	2	6
4:45 PM	0	0	0	0	2	0	2	0	0	0	0	0	0	1	0	1	3
Total	14	0	0	14	5	0	5	0	0	0	0	0	2	5	0	7	26
5:00 PM	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	2
5:30 PM	1	0	0	1	3	0	3	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	1	0	1	2	0	2	0	0	0	0	0	1	2	0	3	6
Total	3	2	0	5	6	0	6	0	0	0	0	0	1	3	0	4	15
6:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
6:15 PM	1	0	0	1	2	0	2	0	0	0	0	0	0	2	0	2	5
Total	1	0	0	1	3	0	3	0	0	0	0	0	0	2	0	2	6
Grand Total	22	4	0	26	16	0	16	0	0	0	0	0	3	17	0	20	62
Approach %	84.6	15.4	0.0		100.0	0.0		0.0	0.0	0.0	0.0		15.0	85.0	0.0		
Total %	35.5	6.5	0.0	41.9	25.8	0.0	25.8	0.0	0.0	0.0	0.0	0.0	4.8	27.4	0.0	32.3	
Exiting Leg Total	17				0			23					22				62

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

	Winthrop Avenue (Route 145				Route 1 NB UTurn Ramp			Route 1 SB Onramp					Winthrop Avenue (Route 145				
	East				Southeast			South					West				
	Thru	Left	U-Turn	Total	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
3:30 PM	4	1	0	5	1	0	1	0	0	0	0	0	0	4	0	4	10
3:45 PM	0	1	0	1	1	0	1	0	0	0	0	0	0	3	0	3	5
4:00 PM	9	0	0	9	0	0	0	0	0	0	0	0	2	1	0	3	12
4:15 PM	3	0	0	3	1	0	1	0	0	0	0	0	0	1	0	1	5
Total Volume	16	2	0	18	3	0	3	0	0	0	0	0	2	9	0	11	32
% Approach Total	88.9	11.1	0.0		100.0	0.0		0.0	0.0	0.0	0.0		18.2	81.8	0.0		
PHF	0.444	0.500	0.000	0.500	0.750	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.250	0.563	0.000	0.688	0.667
Entering Leg	16	2	0	18	3	0	3	0	0	0	0	0	2	9	0	11	32
Exiting Leg	9				0			7					16				32
Total	27				3			7					27				64



PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **3:30 PM**

End Time: **6:30 PM**

Class:



PRECISION  
DATA  
INDUSTRIES, LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdilic.com

### Bicycles (on Roadway and Crosswalks)

	Winthrop Avenue (Route 145)						Route 1 NB UTurn Ramp					Route 1 SB Onramp								Winthrop Avenue (Route 145)						Total
	East						Southeast					South								West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Hard Left	U-Turn	CW-SWB	CW-NEB	Total	Hard Right	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	3
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	1	0	0	0	0	1	1	0	0	0	1	0	0	0	0	2	1	3	0	0	0	0	0	0	0	5
Approach %	100.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	66.7	33.3		0.0	0.0	0.0	0.0	0.0			
Total %	20.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	40.0	20.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0						0					4								1						5

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Winthrop Avenue (Route 145)						Route 1 NB UTurn Ramp						Route 1 SB Onramp								Winthrop Avenue (Route 145)						
	East						Southeast						South								West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Hard Left	U-Turn	CW-SWB	CW-NEB	Total	Hard Right	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total Volume	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
% Approach Total	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0				
PHF	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.250	
Entering Leg	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Exiting Leg						0					0							0						1		1	
Total						1					0							0						1		2	

PDI File #: **175607 (11)**

Location: **S: Route 1 SB Onramp**

Location: **E: Winthrop Avenue (Route 145 W: Winthrop Avenue (Route 145 SE: Route 1 NB UTurn Ramp**

City, State: **Revere, MA**

Client: **VHB/ A. Berthume**

Site Code: **13796.00**

Count Date: **Tuesday, May 09, 2017**

Start Time: **3:30 PM**

End Time: **6:30 PM**

Class:



PRECISION  
D A T A  
INDUSTRIES LLC  
46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdilic.com

### Pedestrians

	Winthrop Avenue (Route 145)						Route 1 NB UTurn Ramp					Route 1 SB Onramp								Winthrop Avenue (Route 145)						Total
	East						Southeast					South								West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Hard Left	U-Turn	CW-SWB	CW-NEB	Total	Hard Right	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	5	0	0	0	0	0	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	7	0	0	0	0	0	0	0	7
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	10	15	0	0	0	0	0	0	0	15
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	33.3	66.7		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	66.7	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0						0					15								0						15

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Winthrop Avenue (Route 145)						Route 1 NB UTurn Ramp						Route 1 SB Onramp								Winthrop Avenue (Route 145)						
	East						Southeast						South								West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Hard Left	U-Turn	CW-SWB	CW-NEB	Total	Hard Right	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	Total		
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	2	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	0	0	4	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	8	0	0	0	0	0	0	0	8	
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	37.5	62.5		0.0	0.0	0.0	0.0	0.0				
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.417	0.500	0.000	0.000	0.000	0.000	0.000	0.000		0.500	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	8	0	0	0	0	0	0	0	8	
Exiting Leg	0						0						8								0						8
Total	0						0						16								0						16

PDI File #: **175607 (12)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	32	229	0	0	261	47	329	0	0	376	0	117	0	0	117	0	0	0	0	0	754
6:45 AM	42	208	0	0	250	46	273	3	0	322	0	150	0	0	150	0	0	0	0	0	722
Total	74	437	0	0	511	93	602	3	0	698	0	267	0	0	267	0	0	0	0	0	1476
7:00 AM	51	204	0	0	255	46	308	1	0	355	0	143	0	0	143	0	0	0	0	0	753
7:15 AM	72	218	0	0	290	70	268	1	0	339	0	174	0	0	174	0	0	0	0	0	803
7:30 AM	107	201	0	0	308	78	238	2	0	318	0	158	0	0	158	0	0	0	0	0	784
7:45 AM	84	174	0	0	258	68	250	0	0	318	0	140	0	0	140	0	0	0	0	0	716
Total	314	797	0	0	1111	262	1064	4	0	1330	0	615	0	0	615	0	0	0	0	0	3056
8:00 AM	72	211	0	0	283	58	235	0	0	293	0	149	0	0	149	0	0	0	0	0	725
8:15 AM	62	217	0	0	279	78	303	0	0	381	0	159	0	0	159	0	0	0	0	0	819
8:30 AM	65	223	0	0	288	86	276	1	0	363	0	137	0	0	137	0	0	0	0	0	788
8:45 AM	53	218	0	0	271	57	292	0	0	349	0	127	0	0	127	0	0	0	0	0	747
Total	252	869	0	0	1121	279	1106	1	0	1386	0	572	0	0	572	0	0	0	0	0	3079
9:00 AM	53	200	0	0	253	64	258	2	0	324	0	158	0	0	158	0	0	0	0	0	735
9:15 AM	56	204	0	0	260	58	298	0	0	356	0	147	0	0	147	0	0	0	0	0	763
Total	109	404	0	0	513	122	556	2	0	680	0	305	0	0	305	0	0	0	0	0	1498
Grand Total	749	2507	0	0	3256	756	3328	10	0	4094	0	1759	0	0	1759	0	0	0	0	0	9109
Approach %	23.0	77.0	0.0	0.0		18.5	81.3	0.2	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	8.2	27.5	0.0	0.0	35.7	8.3	36.5	0.1	0.0	44.9	0.0	19.3	0.0	0.0	19.3	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	2515					0					2517					4077					9109
Cars	702	2281	0	0	2983	706	3141	10	0	3857	0	1571	0	0	1571	0	0	0	0	0	8411
% Cars	93.7	91.0	0.0	0.0	91.6	93.4	94.4	100.0	0.0	94.2	0.0	89.3	0.0	0.0	89.3	0.0	0.0	0.0	0.0	0.0	92.3
Exiting Leg Total	2277					0					2291					3843					8411
Heavy Vehicles	27	197	0	0	224	39	135	0	0	174	0	155	0	0	155	0	0	0	0	0	553
% Heavy Vehicles	3.6	7.9	0.0	0.0	6.9	5.2	4.1	0.0	0.0	4.3	0.0	8.8	0.0	0.0	8.8	0.0	0.0	0.0	0.0	0.0	6.1
Exiting Leg Total	194					0					197					162					553
Buses	20	29	0	0	49	11	52	0	0	63	0	33	0	0	33	0	0	0	0	0	145
% Buses	2.7	1.2	0.0	0.0	1.5	1.5	1.6	0.0	0.0	1.5	0.0	1.9	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.6
Exiting Leg Total	44					0					29					72					145

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:15 AM	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:15 AM	62	217	0	0	279	78	303	0	0	381	0	159	0	0	159	0	0	0	0	0	819
8:30 AM	65	223	0	0	288	86	276	1	0	363	0	137	0	0	137	0	0	0	0	0	788
8:45 AM	53	218	0	0	271	57	292	0	0	349	0	127	0	0	127	0	0	0	0	0	747
9:00 AM	53	200	0	0	253	64	258	2	0	324	0	158	0	0	158	0	0	0	0	0	735
Total Volume	233	858	0	0	1091	285	1129	3	0	1417	0	581	0	0	581	0	0	0	0	0	3089
% Approach Total	21.4	78.6	0.0	0.0		20.1	79.7	0.2	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.896	0.962	0.000	0.000	0.947	0.828	0.932	0.375	0.000	0.930	0.000	0.914	0.000	0.000	0.914	0.000	0.000	0.000	0.000	0.000	0.943
Cars	212	764	0	0	976	265	1069	3	0	1337	0	511	0	0	511	0	0	0	0	0	2824
Cars %	91.0	89.0	0.0	0.0	89.5	93.0	94.7	100.0	0.0	94.4	0.0	88.0	0.0	0.0	88.0	0.0	0.0	0.0	0.0	0.0	91.4
Heavy Vehicles	16	82	0	0	98	18	38	0	0	56	0	57	0	0	57	0	0	0	0	0	211
Heavy Vehicles %	6.9	9.6	0.0	0.0	9.0	6.3	3.4	0.0	0.0	4.0	0.0	9.8	0.0	0.0	9.8	0.0	0.0	0.0	0.0	0.0	6.8
Buses	5	12	0	0	17	2	22	0	0	24	0	13	0	0	13	0	0	0	0	0	54
Buses %	2.1	1.4	0.0	0.0	1.6	0.7	1.9	0.0	0.0	1.7	0.0	2.2	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	1.7
Cars Enter Leg	212	764	0	0	976	265	1069	3	0	1337	0	511	0	0	511	0	0	0	0	0	2824
Heavy Enter Leg	16	82	0	0	98	18	38	0	0	56	0	57	0	0	57	0	0	0	0	0	211
Bus Enter Leg	5	12	0	0	17	2	22	0	0	24	0	13	0	0	13	0	0	0	0	0	54
Total Entering Leg	233	858	0	0	1091	285	1129	3	0	1417	0	581	0	0	581	0	0	0	0	0	3089
Cars Exiting Leg	776					0					767					1281					2824

PDI File #: **175607 (12)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



**Cars, Heavy Vehicles, and Buses (Combined)**

	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
Heavy Exiting Leg	75					0					82					54					211
Buses Exiting Leg	15					0					12					27					54
Total Exiting Leg	866					0					861					1362					3089

PDI File #: **175607 (12)**  
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 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars

	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	32	215	0	0	247	44	304	0	0	348	0	105	0	0	105	0	0	0	0	0	700
6:45 AM	42	192	0	0	234	40	255	3	0	298	0	136	0	0	136	0	0	0	0	0	668
Total	74	407	0	0	481	84	559	3	0	646	0	241	0	0	241	0	0	0	0	0	1368
7:00 AM	47	186	0	0	233	44	297	1	0	342	0	131	0	0	131	0	0	0	0	0	706
7:15 AM	67	201	0	0	268	67	252	1	0	320	0	153	0	0	153	0	0	0	0	0	741
7:30 AM	102	189	0	0	291	75	221	2	0	298	0	146	0	0	146	0	0	0	0	0	735
7:45 AM	78	159	0	0	237	65	237	0	0	302	0	130	0	0	130	0	0	0	0	0	669
Total	294	735	0	0	1029	251	1007	4	0	1262	0	560	0	0	560	0	0	0	0	0	2851
8:00 AM	69	194	0	0	263	54	225	0	0	279	0	132	0	0	132	0	0	0	0	0	674
8:15 AM	59	198	0	0	257	72	290	0	0	362	0	147	0	0	147	0	0	0	0	0	766
8:30 AM	61	204	0	0	265	81	263	1	0	345	0	118	0	0	118	0	0	0	0	0	728
8:45 AM	44	197	0	0	241	55	277	0	0	332	0	110	0	0	110	0	0	0	0	0	683
Total	233	793	0	0	1026	262	1055	1	0	1318	0	507	0	0	507	0	0	0	0	0	2851
9:00 AM	48	165	0	0	213	57	239	2	0	298	0	136	0	0	136	0	0	0	0	0	647
9:15 AM	53	181	0	0	234	52	281	0	0	333	0	127	0	0	127	0	0	0	0	0	694
Total	101	346	0	0	447	109	520	2	0	631	0	263	0	0	263	0	0	0	0	0	1341
Grand Total	702	2281	0	0	2983	706	3141	10	0	3857	0	1571	0	0	1571	0	0	0	0	0	8411
Approach %	23.5	76.5	0.0	0.0		18.3	81.4	0.3	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	8.3	27.1	0.0	0.0	35.5	8.4	37.3	0.1	0.0	45.9	0.0	18.7	0.0	0.0	18.7	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	2277					0					2291					3843					8411

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	47	186	0	0	233	44	297	1	0	342	0	131	0	0	131	0	0	0	0	0	706
7:15 AM	67	201	0	0	268	67	252	1	0	320	0	153	0	0	153	0	0	0	0	0	741
7:30 AM	102	189	0	0	291	75	221	2	0	298	0	146	0	0	146	0	0	0	0	0	735
7:45 AM	78	159	0	0	237	65	237	0	0	302	0	130	0	0	130	0	0	0	0	0	669
Total Volume	294	735	0	0	1029	251	1007	4	0	1262	0	560	0	0	560	0	0	0	0	0	2851
% Approach Total	28.6	71.4	0.0	0.0		19.9	79.8	0.3	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.721	0.914	0.000	0.000	0.884	0.837	0.848	0.500	0.000	0.923	0.000	0.915	0.000	0.000	0.915	0.000	0.000	0.000	0.000	0.000	0.962
Entering Leg	294	735	0	0	1029	251	1007	4	0	1262	0	560	0	0	560	0	0	0	0	0	2851
Exiting Leg	811					0					739					1301					2851
Total	1840					1262					1299					1301					5702

PDI File #: **175607 (12)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	14	0	0	14	2	22	0	0	24	0	9	0	0	9	0	0	0	0	0	47
6:45 AM	0	12	0	0	12	6	13	0	0	19	0	13	0	0	13	0	0	0	0	0	44
Total	0	26	0	0	26	8	35	0	0	43	0	22	0	0	22	0	0	0	0	0	91
7:00 AM	2	17	0	0	19	1	7	0	0	8	0	10	0	0	10	0	0	0	0	0	37
7:15 AM	0	15	0	0	15	2	12	0	0	14	0	17	0	0	17	0	0	0	0	0	46
7:30 AM	1	11	0	0	12	2	13	0	0	15	0	10	0	0	10	0	0	0	0	0	37
7:45 AM	3	14	0	0	17	2	11	0	0	13	0	8	0	0	8	0	0	0	0	0	38
Total	6	57	0	0	63	7	43	0	0	50	0	45	0	0	45	0	0	0	0	0	158
8:00 AM	2	13	0	0	15	3	7	0	0	10	0	13	0	0	13	0	0	0	0	0	38
8:15 AM	2	18	0	0	20	6	9	0	0	15	0	9	0	0	9	0	0	0	0	0	44
8:30 AM	2	17	0	0	19	4	9	0	0	13	0	17	0	0	17	0	0	0	0	0	49
8:45 AM	7	20	0	0	27	1	9	0	0	10	0	15	0	0	15	0	0	0	0	0	52
Total	13	68	0	0	81	14	34	0	0	48	0	54	0	0	54	0	0	0	0	0	183
9:00 AM	5	27	0	0	32	7	11	0	0	18	0	16	0	0	16	0	0	0	0	0	66
9:15 AM	3	19	0	0	22	3	12	0	0	15	0	18	0	0	18	0	0	0	0	0	55
Total	8	46	0	0	54	10	23	0	0	33	0	34	0	0	34	0	0	0	0	0	121
Grand Total	27	197	0	0	224	39	135	0	0	174	0	155	0	0	155	0	0	0	0	0	553
Approach %	12.1	87.9	0.0	0.0		22.4	77.6	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	4.9	35.6	0.0	0.0	40.5	7.1	24.4	0.0	0.0	31.5	0.0	28.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	194					0					197					162					553

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:30 AM	2	17	0	0	19	4	9	0	0	13	0	17	0	0	17	0	0	0	0	0	49
8:45 AM	7	20	0	0	27	1	9	0	0	10	0	15	0	0	15	0	0	0	0	0	52
9:00 AM	5	27	0	0	32	7	11	0	0	18	0	16	0	0	16	0	0	0	0	0	66
9:15 AM	3	19	0	0	22	3	12	0	0	15	0	18	0	0	18	0	0	0	0	0	55
Total Volume	17	83	0	0	100	15	41	0	0	56	0	66	0	0	66	0	0	0	0	0	222
% Approach Total	17.0	83.0	0.0	0.0		26.8	73.2	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.607	0.769	0.000	0.000	0.781	0.536	0.854	0.000	0.000	0.778	0.000	0.917	0.000	0.000	0.917	0.000	0.000	0.000	0.000	0.000	0.841
Entering Leg	17	83	0	0	100	15	41	0	0	56	0	66	0	0	66	0	0	0	0	0	222
Exiting Leg	81					0					83					58					222
Total	181					56					149					58					444

PDI File #: **175607 (12)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Buses

	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	0	0	0	0	1	3	0	0	4	0	3	0	0	3	0	0	0	0	0	7
6:45 AM	0	4	0	0	4	0	5	0	0	5	0	1	0	0	1	0	0	0	0	0	10
Total	0	4	0	0	4	1	8	0	0	9	0	4	0	0	4	0	0	0	0	0	17
7:00 AM	2	1	0	0	3	1	4	0	0	5	0	2	0	0	2	0	0	0	0	0	10
7:15 AM	5	2	0	0	7	1	4	0	0	5	0	4	0	0	4	0	0	0	0	0	16
7:30 AM	4	1	0	0	5	1	4	0	0	5	0	2	0	0	2	0	0	0	0	0	12
7:45 AM	3	1	0	0	4	1	2	0	0	3	0	2	0	0	2	0	0	0	0	0	9
Total	14	5	0	0	19	4	14	0	0	18	0	10	0	0	10	0	0	0	0	0	47
8:00 AM	1	4	0	0	5	1	3	0	0	4	0	4	0	0	4	0	0	0	0	0	13
8:15 AM	1	1	0	0	2	0	4	0	0	4	0	3	0	0	3	0	0	0	0	0	9
8:30 AM	2	2	0	0	4	1	4	0	0	5	0	2	0	0	2	0	0	0	0	0	11
8:45 AM	2	1	0	0	3	1	6	0	0	7	0	2	0	0	2	0	0	0	0	0	12
Total	6	8	0	0	14	3	17	0	0	20	0	11	0	0	11	0	0	0	0	0	45
9:00 AM	0	8	0	0	8	0	8	0	0	8	0	6	0	0	6	0	0	0	0	0	22
9:15 AM	0	4	0	0	4	3	5	0	0	8	0	2	0	0	2	0	0	0	0	0	14
Total	0	12	0	0	12	3	13	0	0	16	0	8	0	0	8	0	0	0	0	0	36
Grand Total	20	29	0	0	49	11	52	0	0	63	0	33	0	0	33	0	0	0	0	0	145
Approach %	40.8	59.2	0.0	0.0		17.5	82.5	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	13.8	20.0	0.0	0.0	33.8	7.6	35.9	0.0	0.0	43.4	0.0	22.8	0.0	0.0	22.8	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	44					0					29					72					145

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:30 AM	2	2	0	0	4	1	4	0	0	5	0	2	0	0	2	0	0	0	0	0	11
8:45 AM	2	1	0	0	3	1	6	0	0	7	0	2	0	0	2	0	0	0	0	0	12
9:00 AM	0	8	0	0	8	0	8	0	0	8	0	6	0	0	6	0	0	0	0	0	22
9:15 AM	0	4	0	0	4	3	5	0	0	8	0	2	0	0	2	0	0	0	0	0	14
Total Volume	4	15	0	0	19	5	23	0	0	28	0	12	0	0	12	0	0	0	0	0	59
% Approach Total	21.1	78.9	0.0	0.0		17.9	82.1	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.500	0.469	0.000	0.000	0.594	0.417	0.719	0.000	0.000	0.875	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.670
Entering Leg	4	15	0	0	19	5	23	0	0	28	0	12	0	0	12	0	0	0	0	0	59
Exiting Leg	17					0					15					27					59
Total	36					28					27					27					118

PDI File #: **175607 (12)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
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 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



**Bicycles (on Roadway and Crosswalks)**

	American Legion Highway (Route 60)								Rotary								American Legion Highway (Route 60)								Rotary								Total
	North								East								South								West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total					
6:30 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1				
Total	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
9:15 AM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2				
Total	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2					
Grand Total	0	0	0	0	1	1	2	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	4					
Approach %	0.0	0.0	0.0	0.0	50.0	50.0		0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0						
Total %	0.0	0.0	0.0	0.0	25.0	25.0	50.0	0.0	25.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	25.0					
Exiting Leg Total	2							1							0							1							4				

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	American Legion Highway (Route 60)							Rotary							American Legion Highway (Route 60)							Rotary							
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Total Volume	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2
% Approach Total	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.250
Entering Leg	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Exiting Leg	1							1							0							0							2
Total	2							1							0							1							4



PDI File #: **175607 (12)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



**Pedestrians**

	American Legion Highway (Route 60)							Rotary							American Legion Highway (Route 60)							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:00 AM	0	0	0	0	1	9	10	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	13
7:15 AM	0	0	0	0	1	8	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	2	6	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Total	0	0	0	0	4	23	27	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	30
8:00 AM	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	0	0	0	3	5	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
9:00 AM	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
9:15 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Grand Total	0	0	0	0	9	34	43	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	46
Approach %	0.0	0.0	0.0	0.0	20.9	79.1		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	19.6	73.9	93.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	43							0							3							0							46

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	American Legion Highway (Route 60)							Rotary							American Legion Highway (Route 60)							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	1	9	10	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	13
7:15 AM	0	0	0	0	1	8	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	2	6	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
Total Volume	0	0	0	0	4	23	27	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	30	
% Approach Total	0.0	0.0	0.0	0.0	14.8	85.2		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.500	0.639	0.675	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.577	
Entering Leg	0	0	0	0	4	23	27	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	30	
Exiting Leg	27							0							3							0							30
Total	54							0							6							0							60

PDI File #: **175607 (12)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	78	205	0	0	283	64	313	0	0	377	0	194	0	0	194	0	0	0	0	0	854
3:45 PM	89	214	0	0	303	60	273	0	0	333	0	225	0	0	225	0	0	0	0	0	861
Total	167	419	0	0	586	124	586	0	0	710	0	419	0	0	419	0	0	0	0	0	1715
4:00 PM	110	171	0	0	281	85	258	0	0	343	0	233	0	0	233	0	0	0	0	0	857
4:15 PM	88	182	0	0	270	84	300	0	0	384	0	218	0	0	218	0	0	0	0	0	872
4:30 PM	71	204	0	0	275	90	314	0	0	404	0	191	0	0	191	0	0	0	0	0	870
4:45 PM	74	199	0	0	273	70	281	0	0	351	0	238	0	0	238	0	0	0	0	0	862
Total	343	756	0	0	1099	329	1153	0	0	1482	0	880	0	0	880	0	0	0	0	0	3461
5:00 PM	66	182	0	0	248	97	296	0	0	393	0	244	0	0	244	0	0	0	0	0	885
5:15 PM	73	197	0	0	270	88	283	0	0	371	0	196	0	0	196	0	0	0	0	0	837
5:30 PM	73	183	0	0	256	88	299	0	0	387	0	215	0	0	215	0	0	0	0	0	858
5:45 PM	88	194	0	0	282	78	270	0	0	348	0	221	0	0	221	0	0	0	0	0	851
Total	300	756	0	0	1056	351	1148	0	0	1499	0	876	0	0	876	0	0	0	0	0	3431
6:00 PM	93	159	0	0	252	89	291	0	0	380	0	215	0	0	215	0	0	0	0	0	847
6:15 PM	76	151	0	0	227	90	259	0	0	349	0	212	0	0	212	0	0	0	0	0	788
Total	169	310	0	0	479	179	550	0	0	729	0	427	0	0	427	0	0	0	0	0	1635
Grand Total	979	2241	0	0	3220	983	3437	0	0	4420	0	2602	0	0	2602	0	0	0	0	0	10242
Approach %	30.4	69.6	0.0	0.0		22.2	77.8	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	9.6	21.9	0.0	0.0	31.4	9.6	33.6	0.0	0.0	43.2	0.0	25.4	0.0	0.0	25.4	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	3585					0					2241					4416					10242
Cars	949	2092	0	0	3041	957	3344	0	0	4301	0	2459	0	0	2459	0	0	0	0	0	9801
% Cars	96.9	93.4	0.0	0.0	94.4	97.4	97.3	0.0	0.0	97.3	0.0	94.5	0.0	0.0	94.5	0.0	0.0	0.0	0.0	0.0	95.7
Exiting Leg Total	3416					0					2092					4293					9801
Heavy Vehicles	18	106	0	0	124	20	44	0	0	64	0	102	0	0	102	0	0	0	0	0	290
% Heavy Vehicles	1.8	4.7	0.0	0.0	3.9	2.0	1.3	0.0	0.0	1.4	0.0	3.9	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	2.8
Exiting Leg Total	122					0					106					62					290
Buses	12	43	0	0	55	6	49	0	0	55	0	41	0	0	41	0	0	0	0	0	151
% Buses	1.2	1.9	0.0	0.0	1.7	0.6	1.4	0.0	0.0	1.2	0.0	1.6	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	1.5
Exiting Leg Total	47					0					43					61					151

### Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:15 PM	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:15 PM	88	182	0	0	270	84	300	0	0	384	0	218	0	0	218	0	0	0	0	0	872
4:30 PM	71	204	0	0	275	90	314	0	0	404	0	191	0	0	191	0	0	0	0	0	870
4:45 PM	74	199	0	0	273	70	281	0	0	351	0	238	0	0	238	0	0	0	0	0	862
5:00 PM	66	182	0	0	248	97	296	0	0	393	0	244	0	0	244	0	0	0	0	0	885
Total Volume	299	767	0	0	1066	341	1191	0	0	1532	0	891	0	0	891	0	0	0	0	0	3489
% Approach Total	28.0	72.0	0.0	0.0		22.3	77.7	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.849	0.940	0.000	0.000	0.969	0.879	0.948	0.000	0.000	0.948	0.000	0.913	0.000	0.000	0.913	0.000	0.000	0.000	0.000	0.000	0.986
Cars	289	716	0	0	1005	326	1155	0	0	1481	0	835	0	0	835	0	0	0	0	0	3321
Cars %	96.7	93.4	0.0	0.0	94.3	95.6	97.0	0.0	0.0	96.7	0.0	93.7	0.0	0.0	93.7	0.0	0.0	0.0	0.0	0.0	95.2
Heavy Vehicles	7	37	0	0	44	12	16	0	0	28	0	39	0	0	39	0	0	0	0	0	111
Heavy Vehicles %	2.3	4.8	0.0	0.0	4.1	3.5	1.3	0.0	0.0	1.8	0.0	4.4	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	3.2
Buses	3	14	0	0	17	3	20	0	0	23	0	17	0	0	17	0	0	0	0	0	57
Buses %	1.0	1.8	0.0	0.0	1.6	0.9	1.7	0.0	0.0	1.5	0.0	1.9	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.6
Cars Enter Leg	289	716	0	0	1005	326	1155	0	0	1481	0	835	0	0	835	0	0	0	0	0	3321
Heavy Enter Leg	7	37	0	0	44	12	16	0	0	28	0	39	0	0	39	0	0	0	0	0	111
Bus Enter Leg	3	14	0	0	17	3	20	0	0	23	0	17	0	0	17	0	0	0	0	0	57
Total Entering Leg	299	767	0	0	1066	341	1191	0	0	1532	0	891	0	0	891	0	0	0	0	0	3489

PDI File #: **175607 (12)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



**Cars, Heavy Vehicles, and Buses (Combined)**

	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
Cars Exiting Leg	1161					0					716					1444					3321
Heavy Exiting Leg	51					0					37					23					111
Buses Exiting Leg	20					0					14					23					57
Total Exiting Leg	1232					0					767					1490					3489

PDI File #: **175607 (12)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars

	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	77	190	0	0	267	64	303	0	0	367	0	183	0	0	183	0	0	0	0	0	817
3:45 PM	86	206	0	0	292	57	263	0	0	320	0	214	0	0	214	0	0	0	0	0	826
Total	163	396	0	0	559	121	566	0	0	687	0	397	0	0	397	0	0	0	0	0	1643
4:00 PM	103	153	0	0	256	85	251	0	0	336	0	222	0	0	222	0	0	0	0	0	814
4:15 PM	83	171	0	0	254	81	285	0	0	366	0	205	0	0	205	0	0	0	0	0	825
4:30 PM	68	190	0	0	258	83	308	0	0	391	0	177	0	0	177	0	0	0	0	0	826
4:45 PM	72	186	0	0	258	67	273	0	0	340	0	217	0	0	217	0	0	0	0	0	815
Total	326	700	0	0	1026	316	1117	0	0	1433	0	821	0	0	821	0	0	0	0	0	3280
5:00 PM	66	169	0	0	235	95	289	0	0	384	0	236	0	0	236	0	0	0	0	0	855
5:15 PM	68	184	0	0	252	86	276	0	0	362	0	185	0	0	185	0	0	0	0	0	799
5:30 PM	73	170	0	0	243	88	294	0	0	382	0	206	0	0	206	0	0	0	0	0	831
5:45 PM	87	184	0	0	271	76	259	0	0	335	0	207	0	0	207	0	0	0	0	0	813
Total	294	707	0	0	1001	345	1118	0	0	1463	0	834	0	0	834	0	0	0	0	0	3298
6:00 PM	93	148	0	0	241	87	286	0	0	373	0	206	0	0	206	0	0	0	0	0	820
6:15 PM	73	141	0	0	214	88	257	0	0	345	0	201	0	0	201	0	0	0	0	0	760
Total	166	289	0	0	455	175	543	0	0	718	0	407	0	0	407	0	0	0	0	0	1580
Grand Total	949	2092	0	0	3041	957	3344	0	0	4301	0	2459	0	0	2459	0	0	0	0	0	9801
Approach %	31.2	68.8	0.0	0.0		22.3	77.7	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	9.7	21.3	0.0	0.0	31.0	9.8	34.1	0.0	0.0	43.9	0.0	25.1	0.0	0.0	25.1	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	3416					0					2092					4293					9801

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:15 PM	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:15 PM	83	171	0	0	254	81	285	0	0	366	0	205	0	0	205	0	0	0	0	0	825
4:30 PM	68	190	0	0	258	83	308	0	0	391	0	177	0	0	177	0	0	0	0	0	826
4:45 PM	72	186	0	0	258	67	273	0	0	340	0	217	0	0	217	0	0	0	0	0	815
5:00 PM	66	169	0	0	235	95	289	0	0	384	0	236	0	0	236	0	0	0	0	0	855
Total Volume	289	716	0	0	1005	326	1155	0	0	1481	0	835	0	0	835	0	0	0	0	0	3321
% Approach Total	28.8	71.2	0.0	0.0		22.0	78.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.870	0.942	0.000	0.000	0.974	0.858	0.938	0.000	0.000	0.947	0.000	0.885	0.000	0.000	0.885	0.000	0.000	0.000	0.000	0.000	0.971
Entering Leg	289	716	0	0	1005	326	1155	0	0	1481	0	835	0	0	835	0	0	0	0	0	3321
Exiting Leg	1161					0					716					1444					3321
Total	2166					1481					1551					1444					6642

PDI File #: **175607 (12)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	1	10	0	0	11	0	5	0	0	5	0	8	0	0	8	0	0	0	0	0	24
3:45 PM	3	5	0	0	8	2	4	0	0	6	0	9	0	0	9	0	0	0	0	0	23
Total	4	15	0	0	19	2	9	0	0	11	0	17	0	0	17	0	0	0	0	0	47
4:00 PM	3	11	0	0	14	0	5	0	0	5	0	7	0	0	7	0	0	0	0	0	26
4:15 PM	4	8	0	0	12	3	7	0	0	10	0	11	0	0	11	0	0	0	0	0	33
4:30 PM	2	9	0	0	11	5	1	0	0	6	0	10	0	0	10	0	0	0	0	0	27
4:45 PM	1	11	0	0	12	3	4	0	0	7	0	15	0	0	15	0	0	0	0	0	34
Total	10	39	0	0	49	11	17	0	0	28	0	43	0	0	43	0	0	0	0	0	120
5:00 PM	0	9	0	0	9	1	4	0	0	5	0	3	0	0	3	0	0	0	0	0	17
5:15 PM	2	10	0	0	12	2	3	0	0	5	0	11	0	0	11	0	0	0	0	0	28
5:30 PM	0	9	0	0	9	0	2	0	0	2	0	7	0	0	7	0	0	0	0	0	18
5:45 PM	1	9	0	0	10	1	7	0	0	8	0	7	0	0	7	0	0	0	0	0	25
Total	3	37	0	0	40	4	16	0	0	20	0	28	0	0	28	0	0	0	0	0	88
6:00 PM	0	6	0	0	6	2	1	0	0	3	0	6	0	0	6	0	0	0	0	0	15
6:15 PM	1	9	0	0	10	1	1	0	0	2	0	8	0	0	8	0	0	0	0	0	20
Total	1	15	0	0	16	3	2	0	0	5	0	14	0	0	14	0	0	0	0	0	35
Grand Total	18	106	0	0	124	20	44	0	0	64	0	102	0	0	102	0	0	0	0	0	290
Approach %	14.5	85.5	0.0	0.0		31.3	68.8	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	6.2	36.6	0.0	0.0	42.8	6.9	15.2	0.0	0.0	22.1	0.0	35.2	0.0	0.0	35.2	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	122					0					106					62					290

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:00 PM	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	3	11	0	0	14	0	5	0	0	5	0	7	0	0	7	0	0	0	0	0	26
4:15 PM	4	8	0	0	12	3	7	0	0	10	0	11	0	0	11	0	0	0	0	0	33
4:30 PM	2	9	0	0	11	5	1	0	0	6	0	10	0	0	10	0	0	0	0	0	27
4:45 PM	1	11	0	0	12	3	4	0	0	7	0	15	0	0	15	0	0	0	0	0	34
Total Volume	10	39	0	0	49	11	17	0	0	28	0	43	0	0	43	0	0	0	0	0	120
% Approach Total	20.4	79.6	0.0	0.0		39.3	60.7	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.625	0.886	0.000	0.000	0.875	0.550	0.607	0.000	0.000	0.700	0.000	0.717	0.000	0.000	0.717	0.000	0.000	0.000	0.000	0.000	0.882
Entering Leg	10	39	0	0	49	11	17	0	0	28	0	43	0	0	43	0	0	0	0	0	120
Exiting Leg	54					0					39					27					120
Total	103					28					82					27					240

PDI File #: **175607 (12)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	5	0	0	5	0	5	0	0	5	0	3	0	0	3	0	0	0	0	0	13
3:45 PM	0	3	0	0	3	1	6	0	0	7	0	2	0	0	2	0	0	0	0	0	12
Total	0	8	0	0	8	1	11	0	0	12	0	5	0	0	5	0	0	0	0	0	25
4:00 PM	4	7	0	0	11	0	2	0	0	2	0	4	0	0	4	0	0	0	0	0	17
4:15 PM	1	3	0	0	4	0	8	0	0	8	0	2	0	0	2	0	0	0	0	0	14
4:30 PM	1	5	0	0	6	2	5	0	0	7	0	4	0	0	4	0	0	0	0	0	17
4:45 PM	1	2	0	0	3	0	4	0	0	4	0	6	0	0	6	0	0	0	0	0	13
Total	7	17	0	0	24	2	19	0	0	21	0	16	0	0	16	0	0	0	0	0	61
5:00 PM	0	4	0	0	4	1	3	0	0	4	0	5	0	0	5	0	0	0	0	0	13
5:15 PM	3	3	0	0	6	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	10
5:30 PM	0	4	0	0	4	0	3	0	0	3	0	2	0	0	2	0	0	0	0	0	9
5:45 PM	0	1	0	0	1	1	4	0	0	5	0	7	0	0	7	0	0	0	0	0	13
Total	3	12	0	0	15	2	14	0	0	16	0	14	0	0	14	0	0	0	0	0	45
6:00 PM	0	5	0	0	5	0	4	0	0	4	0	3	0	0	3	0	0	0	0	0	12
6:15 PM	2	1	0	0	3	1	1	0	0	2	0	3	0	0	3	0	0	0	0	0	8
Total	2	6	0	0	8	1	5	0	0	6	0	6	0	0	6	0	0	0	0	0	20
Grand Total	12	43	0	0	55	6	49	0	0	55	0	41	0	0	41	0	0	0	0	0	151
Approach %	21.8	78.2	0.0	0.0		10.9	89.1	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	7.9	28.5	0.0	0.0	36.4	4.0	32.5	0.0	0.0	36.4	0.0	27.2	0.0	0.0	27.2	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	47					0					43					61					151

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:00 PM	American Legion Highway (Route 60)					Rotary					American Legion Highway (Route 60)					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	4	7	0	0	11	0	2	0	0	2	0	4	0	0	4	0	0	0	0	0	17
4:15 PM	1	3	0	0	4	0	8	0	0	8	0	2	0	0	2	0	0	0	0	0	14
4:30 PM	1	5	0	0	6	2	5	0	0	7	0	4	0	0	4	0	0	0	0	0	17
4:45 PM	1	2	0	0	3	0	4	0	0	4	0	6	0	0	6	0	0	0	0	0	13
Total Volume	7	17	0	0	24	2	19	0	0	21	0	16	0	0	16	0	0	0	0	0	61
% Approach Total	29.2	70.8	0.0	0.0		9.5	90.5	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.438	0.607	0.000	0.000	0.545	0.250	0.594	0.000	0.000	0.656	0.000	0.667	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.897
Entering Leg	7	17	0	0	24	2	19	0	0	21	0	16	0	0	16	0	0	0	0	0	61
Exiting Leg	18					0					17					26					61
Total	42					21					33					26					122



PDI File #: **175607 (12)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



**Pedestrians**

	American Legion Highway (Route 60)							Rotary							American Legion Highway (Route 60)							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	7	2	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
3:45 PM	0	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	0	0	0	0	8	6	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
4:00 PM	0	0	0	0	5	6	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
4:15 PM	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	0	0	0	13	8	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
5:00 PM	0	0	0	0	1	8	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
5:15 PM	0	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	3	1	4	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	0	0	0	2	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	0	0	0	0	7	16	23	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	25
6:00 PM	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
6:15 PM	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	0	0	0	4	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Grand Total	0	0	0	0	32	34	66	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	68
Approach %	0.0	0.0	0.0	0.0	48.5	51.5		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	47.1	50.0	97.1	0.0	0.0	0.0	0.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	66							1							1							0							68

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	American Legion Highway (Route 60)							Rotary							American Legion Highway (Route 60)							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	7	2	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
3:45 PM	0	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
4:00 PM	0	0	0	0	5	6	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
4:15 PM	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	15	12	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
% Approach Total	0.0	0.0	0.0	0.0	55.6	44.4		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.536	0.500	0.614	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.614	
Entering Leg	0	0	0	0	15	12	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Exiting Leg	27							0							0							0							27
Total	54							0							0							0							54



PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	240	0	0	240	0	0	0	0	0	2	117	0	0	119	316	64	2	0	382	741
6:45 AM	0	223	0	0	223	0	0	0	0	0	0	149	0	0	149	278	62	0	0	340	712
Total	0	463	0	0	463	0	0	0	0	0	2	266	0	0	268	594	126	2	0	722	1453
7:00 AM	0	204	1	0	205	0	0	0	0	0	0	144	0	0	144	282	101	1	0	384	733
7:15 AM	0	233	0	0	233	1	0	0	0	1	1	172	0	0	173	216	124	0	0	340	747
7:30 AM	0	205	0	0	205	0	0	0	0	0	0	146	0	0	146	208	139	7	0	354	705
7:45 AM	0	180	0	0	180	0	0	0	0	0	0	137	0	0	137	212	127	4	0	343	660
Total	0	822	1	0	823	1	0	0	0	1	1	599	0	0	600	918	491	12	0	1421	2845
8:00 AM	0	213	0	0	213	0	0	0	0	0	0	149	0	0	149	222	115	2	0	339	701
8:15 AM	0	215	0	0	215	0	0	0	0	0	0	160	0	0	160	268	139	1	0	408	783
8:30 AM	0	238	0	0	238	0	0	0	0	0	0	129	0	0	129	277	109	3	0	389	756
8:45 AM	0	206	0	0	206	0	0	0	0	0	0	126	0	0	126	308	92	1	0	401	733
Total	0	872	0	0	872	0	0	0	0	0	0	564	0	0	564	1075	455	7	0	1537	2973
9:00 AM	0	217	0	0	217	0	0	0	0	0	0	150	0	0	150	228	86	1	0	315	682
9:15 AM	0	203	0	0	203	0	0	0	0	0	0	146	0	0	146	269	105	1	0	375	724
Total	0	420	0	0	420	0	0	0	0	0	0	296	0	0	296	497	191	2	0	690	1406
Grand Total	0	2577	1	0	2578	1	0	0	0	1	3	1725	0	0	1728	3084	1263	23	0	4370	8677
Approach %	0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.2	99.8	0.0	0.0		70.6	28.9	0.5	0.0		
Total %	0.0	29.7	0.0	0.0	29.7	0.0	0.0	0.0	0.0	0.0	0.0	19.9	0.0	0.0	19.9	35.5	14.6	0.3	0.0	50.4	
Exiting Leg Total	1749					1267					5661					0					8677
Cars	0	2338	1	0	2339	1	0	0	0	1	3	1529	0	0	1532	2934	1181	23	0	4138	8010
% Cars	0.0	90.7	100.0	0.0	90.7	100.0	0.0	0.0	0.0	100.0	100.0	88.6	0.0	0.0	88.7	95.1	93.5	100.0	0.0	94.7	92.3
Exiting Leg Total	1553					1185					5272					0					8010
Heavy Vehicles	0	211	0	0	211	0	0	0	0	0	0	156	0	0	156	122	33	0	0	155	522
% Heavy Vehicles	0.0	8.2	0.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	9.0	4.0	2.6	0.0	0.0	3.5	6.0
Exiting Leg Total	156					33					333					0					522
Buses	0	28	0	0	28	0	0	0	0	0	0	40	0	0	40	28	49	0	0	77	145
% Buses	0.0	1.1	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	2.3	0.9	3.9	0.0	0.0	1.8	1.7
Exiting Leg Total	40					49					56					0					145

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:00 AM	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:00 AM	0	213	0	0	213	0	0	0	0	0	0	149	0	0	149	222	115	2	0	339	701
8:15 AM	0	215	0	0	215	0	0	0	0	0	0	160	0	0	160	268	139	1	0	408	783
8:30 AM	0	238	0	0	238	0	0	0	0	0	0	129	0	0	129	277	109	3	0	389	756
8:45 AM	0	206	0	0	206	0	0	0	0	0	0	126	0	0	126	308	92	1	0	401	733
Total Volume	0	872	0	0	872	0	0	0	0	0	0	564	0	0	564	1075	455	7	0	1537	2973
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		69.9	29.6	0.5	0.0		
PHF	0.000	0.916	0.000	0.000	0.916	0.000	0.000	0.000	0.000	0.000	0.000	0.881	0.000	0.000	0.881	0.873	0.818	0.583	0.000	0.942	0.949
Cars	0	797	0	0	797	0	0	0	0	0	0	496	0	0	496	1035	429	7	0	1471	2764
Cars %	0.0	91.4	0.0	0.0	91.4	0.0	0.0	0.0	0.0	0.0	0.0	87.9	0.0	0.0	87.9	96.3	94.3	100.0	0.0	95.7	93.0
Heavy Vehicles	0	67	0	0	67	0	0	0	0	0	0	51	0	0	51	31	15	0	0	46	164
Heavy Vehicles %	0.0	7.7	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	9.0	2.9	3.3	0.0	0.0	3.0	5.5
Buses	0	8	0	0	8	0	0	0	0	0	0	17	0	0	17	9	11	0	0	20	45
Buses %	0.0	0.9	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.8	2.4	0.0	0.0	1.3	1.5
Cars Enter Leg	0	797	0	0	797	0	0	0	0	0	0	496	0	0	496	1035	429	7	0	1471	2764
Heavy Enter Leg	0	67	0	0	67	0	0	0	0	0	0	51	0	0	51	31	15	0	0	46	164
Bus Enter Leg	0	8	0	0	8	0	0	0	0	0	0	17	0	0	17	9	11	0	0	20	45
Total Entering Leg	0	872	0	0	872	0	0	0	0	0	0	564	0	0	564	1075	455	7	0	1537	2973
Cars Exiting Leg	503					429					1832					0					2764

PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



**Cars, Heavy Vehicles, and Buses (Combined)**

	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
Heavy Exiting Leg	51					15					98					0					164
Buses Exiting Leg	17					11					17					0					45
Total Exiting Leg	571					455					1947					0					2973

PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars

	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	225	0	0	225	0	0	0	0	0	2	105	0	0	107	296	63	2	0	361	693
6:45 AM	0	204	0	0	204	0	0	0	0	0	0	135	0	0	135	255	58	0	0	313	652
Total	0	429	0	0	429	0	0	0	0	0	2	240	0	0	242	551	121	2	0	674	1345
7:00 AM	0	184	1	0	185	0	0	0	0	0	0	132	0	0	132	275	93	1	0	369	686
7:15 AM	0	211	0	0	211	1	0	0	0	1	1	151	0	0	152	205	116	0	0	321	685
7:30 AM	0	194	0	0	194	0	0	0	0	0	0	128	0	0	128	195	130	7	0	332	654
7:45 AM	0	164	0	0	164	0	0	0	0	0	0	127	0	0	127	204	117	4	0	325	616
Total	0	753	1	0	754	1	0	0	0	1	1	538	0	0	539	879	456	12	0	1347	2641
8:00 AM	0	196	0	0	196	0	0	0	0	0	0	129	0	0	129	213	110	2	0	325	650
8:15 AM	0	197	0	0	197	0	0	0	0	0	0	146	0	0	146	259	133	1	0	393	736
8:30 AM	0	219	0	0	219	0	0	0	0	0	0	112	0	0	112	267	99	3	0	369	700
8:45 AM	0	185	0	0	185	0	0	0	0	0	0	109	0	0	109	296	87	1	0	384	678
Total	0	797	0	0	797	0	0	0	0	0	0	496	0	0	496	1035	429	7	0	1471	2764
9:00 AM	0	182	0	0	182	0	0	0	0	0	0	129	0	0	129	212	77	1	0	290	601
9:15 AM	0	177	0	0	177	0	0	0	0	0	0	126	0	0	126	257	98	1	0	356	659
Total	0	359	0	0	359	0	0	0	0	0	0	255	0	0	255	469	175	2	0	646	1260
Grand Total	0	2338	1	0	2339	1	0	0	0	1	3	1529	0	0	1532	2934	1181	23	0	4138	8010
Approach %	0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.2	99.8	0.0	0.0		70.9	28.5	0.6	0.0		
Total %	0.0	29.2	0.0	0.0	29.2	0.0	0.0	0.0	0.0	0.0	0.0	19.1	0.0	0.0	19.1	36.6	14.7	0.3	0.0	51.7	
Exiting Leg Total	1553					1185					5272					0					8010

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:00 AM	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:00 AM	0	196	0	0	196	0	0	0	0	0	0	129	0	0	129	213	110	2	0	325	650
8:15 AM	0	197	0	0	197	0	0	0	0	0	0	146	0	0	146	259	133	1	0	393	736
8:30 AM	0	219	0	0	219	0	0	0	0	0	0	112	0	0	112	267	99	3	0	369	700
8:45 AM	0	185	0	0	185	0	0	0	0	0	0	109	0	0	109	296	87	1	0	384	678
Total Volume	0	797	0	0	797	0	0	0	0	0	0	496	0	0	496	1035	429	7	0	1471	2764
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		70.4	29.2	0.5	0.0		
PHF	0.000	0.910	0.000	0.000	0.910	0.000	0.000	0.000	0.000	0.000	0.000	0.849	0.000	0.000	0.849	0.874	0.806	0.583	0.000	0.936	0.939
Entering Leg	0	797	0	0	797	0	0	0	0	0	0	496	0	0	496	1035	429	7	0	1471	2764
Exiting Leg	503					429					1832					0					2764
Total	1300					429					2328					1471					5528

PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	15	0	0	15	0	0	0	0	0	0	9	0	0	9	17	0	0	0	17	41
6:45 AM	0	15	0	0	15	0	0	0	0	0	0	13	0	0	13	19	1	0	0	20	48
Total	0	30	0	0	30	0	0	0	0	0	0	22	0	0	22	36	1	0	0	37	89
7:00 AM	0	19	0	0	19	0	0	0	0	0	0	11	0	0	11	5	3	0	0	8	38
7:15 AM	0	20	0	0	20	0	0	0	0	0	0	18	0	0	18	9	1	0	0	10	48
7:30 AM	0	10	0	0	10	0	0	0	0	0	0	13	0	0	13	11	2	0	0	13	36
7:45 AM	0	15	0	0	15	0	0	0	0	0	0	8	0	0	8	7	4	0	0	11	34
Total	0	64	0	0	64	0	0	0	0	0	0	50	0	0	50	32	10	0	0	42	156
8:00 AM	0	13	0	0	13	0	0	0	0	0	0	14	0	0	14	7	4	0	0	11	38
8:15 AM	0	17	0	0	17	0	0	0	0	0	0	8	0	0	8	7	4	0	0	11	36
8:30 AM	0	17	0	0	17	0	0	0	0	0	0	15	0	0	15	8	4	0	0	12	44
8:45 AM	0	20	0	0	20	0	0	0	0	0	0	14	0	0	14	9	3	0	0	12	46
Total	0	67	0	0	67	0	0	0	0	0	0	51	0	0	51	31	15	0	0	46	164
9:00 AM	0	28	0	0	28	0	0	0	0	0	0	15	0	0	15	12	4	0	0	16	59
9:15 AM	0	22	0	0	22	0	0	0	0	0	0	18	0	0	18	11	3	0	0	14	54
Total	0	50	0	0	50	0	0	0	0	0	0	33	0	0	33	23	7	0	0	30	113
Grand Total	0	211	0	0	211	0	0	0	0	0	0	156	0	0	156	122	33	0	0	155	522
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		78.7	21.3	0.0	0.0		
Total %	0.0	40.4	0.0	0.0	40.4	0.0	0.0	0.0	0.0	0.0	0.0	29.9	0.0	0.0	29.9	23.4	6.3	0.0	0.0	29.7	
Exiting Leg Total	156					33					333					0					522

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:30 AM	0	17	0	0	17	0	0	0	0	0	0	15	0	0	15	8	4	0	0	12	44
8:45 AM	0	20	0	0	20	0	0	0	0	0	0	14	0	0	14	9	3	0	0	12	46
9:00 AM	0	28	0	0	28	0	0	0	0	0	0	15	0	0	15	12	4	0	0	16	59
9:15 AM	0	22	0	0	22	0	0	0	0	0	0	18	0	0	18	11	3	0	0	14	54
Total Volume	0	87	0	0	87	0	0	0	0	0	0	62	0	0	62	40	14	0	0	54	203
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		74.1	25.9	0.0	0.0		
PHF	0.000	0.777	0.000	0.000	0.777	0.000	0.000	0.000	0.000	0.000	0.000	0.861	0.000	0.000	0.861	0.833	0.875	0.000	0.000	0.844	0.860
Entering Leg	0	87	0	0	87	0	0	0	0	0	0	62	0	0	62	40	14	0	0	54	203
Exiting Leg	62					14					127					0					203
Total	149					14					189					54					406

PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Buses

	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3	1	0	0	4	7
6:45 AM	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	4	3	0	0	7	12
Total	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	7	4	0	0	11	19
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2	5	0	0	7	9
7:15 AM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	2	7	0	0	9	14
7:30 AM	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	2	7	0	0	9	15
7:45 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	1	6	0	0	7	10
Total	0	5	0	0	5	0	0	0	0	0	0	11	0	0	11	7	25	0	0	32	48
8:00 AM	0	4	0	0	4	0	0	0	0	0	0	6	0	0	6	2	1	0	0	3	13
8:15 AM	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	2	2	0	0	4	11
8:30 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	2	6	0	0	8	12
8:45 AM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	3	2	0	0	5	9
Total	0	8	0	0	8	0	0	0	0	0	0	17	0	0	17	9	11	0	0	20	45
9:00 AM	0	7	0	0	7	0	0	0	0	0	0	6	0	0	6	4	5	0	0	9	22
9:15 AM	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	1	4	0	0	5	11
Total	0	11	0	0	11	0	0	0	0	0	0	8	0	0	8	5	9	0	0	14	33
Grand Total	0	28	0	0	28	0	0	0	0	0	0	40	0	0	40	28	49	0	0	77	145
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		36.4	63.6	0.0	0.0		
Total %	0.0	19.3	0.0	0.0	19.3	0.0	0.0	0.0	0.0	0.0	0.0	27.6	0.0	0.0	27.6	19.3	33.8	0.0	0.0	53.1	
Exiting Leg Total	40					49					56					0					145

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:15 AM	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:15 AM	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	2	2	0	0	4	11
8:30 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	2	6	0	0	8	12
8:45 AM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	3	2	0	0	5	9
9:00 AM	0	7	0	0	7	0	0	0	0	0	0	6	0	0	6	4	5	0	0	9	22
Total Volume	0	11	0	0	11	0	0	0	0	0	0	17	0	0	17	11	15	0	0	26	54
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		42.3	57.7	0.0	0.0		
PHF	0.000	0.393	0.000	0.000	0.393	0.000	0.000	0.000	0.000	0.000	0.000	0.708	0.000	0.000	0.708	0.688	0.625	0.000	0.000	0.722	0.614
Entering Leg	0	11	0	0	11	0	0	0	0	0	0	17	0	0	17	11	15	0	0	26	54
Exiting Leg	17					15					22					0					54
Total	28					15					39					26					108

PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



### Bicycles (on Roadway and Crosswalks)

	America Legion Hwy (Rt 60)							Rotary							Route 60/1A/16							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0							0							0							0							0

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:30 AM	America Legion Hwy (Rt 60)							Rotary							Route 60/1A/16							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0							0							0							0							0
Total	0							0							0							0							0

PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Pedestrians

	America Legion Hwy (Rt 60)							Rotary							Route 60/1A/16							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0							0							0							0							0

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:30 AM	America Legion Hwy (Rt 60)							Rotary							Route 60/1A/16							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0							0							0							0							0
Total	0							0							0							0							0

PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	211	0	0	211	0	0	0	0	0	2	195	0	0	197	262	118	1	0	381	789
3:45 PM	0	218	0	0	218	0	0	0	0	0	0	220	0	0	220	224	109	2	0	335	773
Total	0	429	0	0	429	0	0	0	0	0	2	415	0	0	417	486	227	3	0	716	1562
4:00 PM	0	179	0	0	179	0	0	0	0	0	0	226	0	0	226	213	163	7	0	383	788
4:15 PM	0	189	0	0	189	0	0	0	0	0	0	218	0	0	218	223	153	3	0	379	786
4:30 PM	0	204	0	0	204	0	0	0	0	0	3	188	0	0	191	229	132	0	0	361	756
4:45 PM	0	205	0	0	205	0	0	0	0	0	2	233	0	0	235	210	143	4	0	357	797
Total	0	777	0	0	777	0	0	0	0	0	5	865	0	0	870	875	591	14	0	1480	3127
5:00 PM	0	182	0	0	182	0	0	0	0	0	2	236	0	0	238	224	121	1	0	346	766
5:15 PM	0	187	0	0	187	0	0	0	0	0	2	204	0	0	206	215	121	0	0	336	729
5:30 PM	0	187	0	0	187	0	0	0	0	0	1	200	0	0	201	206	122	0	0	328	716
5:45 PM	0	193	0	0	193	0	0	0	0	0	1	215	0	0	216	191	142	1	0	334	743
Total	0	749	0	0	749	0	0	0	0	0	6	855	0	0	861	836	506	2	0	1344	2954
6:00 PM	0	168	0	0	168	0	0	0	0	0	1	207	0	0	208	221	137	0	0	358	734
6:15 PM	0	150	0	0	150	0	0	0	0	0	0	217	0	0	217	212	132	0	0	344	711
Total	0	318	0	0	318	0	0	0	0	0	1	424	0	0	425	433	269	0	0	702	1445
Grand Total	0	2273	0	0	2273	0	0	0	0	0	14	2559	0	0	2573	2630	1593	19	0	4242	9088
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.5	99.5	0.0	0.0		62.0	37.6	0.4	0.0		
Total %	0.0	25.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.2	28.2	0.0	0.0	28.3	28.9	17.5	0.2	0.0	46.7	
Exiting Leg Total	2578					1607					4903					0					9088
Cars	0	2132	0	0	2132	0	0	0	0	0	14	2416	0	0	2430	2566	1527	16	0	4109	8671
% Cars	0.0	93.8	0.0	0.0	93.8	0.0	0.0	0.0	0.0	0.0	100.0	94.4	0.0	0.0	94.4	97.6	95.9	84.2	0.0	96.9	95.4
Exiting Leg Total	2432					1541					4698					0					8671
Heavy Vehicles	0	98	0	0	98	0	0	0	0	0	0	97	0	0	97	43	25	3	0	71	266
% Heavy Vehicles	0.0	4.3	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	3.8	1.6	1.6	15.8	0.0	1.7	2.9
Exiting Leg Total	100					25					141					0					266
Buses	0	43	0	0	43	0	0	0	0	0	0	46	0	0	46	21	41	0	0	62	151
% Buses	0.0	1.9	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	1.8	0.8	2.6	0.0	0.0	1.5	1.7
Exiting Leg Total	46					41					64					0					151

### Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	211	0	0	211	0	0	0	0	0	2	195	0	0	197	262	118	1	0	381	789
3:45 PM	0	218	0	0	218	0	0	0	0	0	0	220	0	0	220	224	109	2	0	335	773
4:00 PM	0	179	0	0	179	0	0	0	0	0	0	226	0	0	226	213	163	7	0	383	788
4:15 PM	0	189	0	0	189	0	0	0	0	0	0	218	0	0	218	223	153	3	0	379	786
Total Volume	0	797	0	0	797	0	0	0	0	0	2	859	0	0	861	922	543	13	0	1478	3136
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.2	99.8	0.0	0.0		62.4	36.7	0.9	0.0		
PHF	0.000	0.914	0.000	0.000	0.914	0.000	0.000	0.000	0.000	0.000	0.250	0.950	0.000	0.000	0.952	0.880	0.833	0.464	0.000	0.965	0.994
Cars	0	749	0	0	749	0	0	0	0	0	2	812	0	0	814	895	513	11	0	1419	2982
Cars %	0.0	94.0	0.0	0.0	94.0	0.0	0.0	0.0	0.0	0.0	100.0	94.5	0.0	0.0	94.5	97.1	94.5	84.6	0.0	96.0	95.1
Heavy Vehicles	0	29	0	0	29	0	0	0	0	0	0	37	0	0	37	18	11	2	0	31	97
Heavy Vehicles %	0.0	3.6	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.3	2.0	2.0	15.4	0.0	2.1	3.1
Buses	0	19	0	0	19	0	0	0	0	0	0	10	0	0	10	9	19	0	0	28	57
Buses %	0.0	2.4	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	1.2	1.0	3.5	0.0	0.0	1.9	1.8
Cars Enter Leg	0	749	0	0	749	0	0	0	0	0	2	812	0	0	814	895	513	11	0	1419	2982
Heavy Enter Leg	0	29	0	0	29	0	0	0	0	0	0	37	0	0	37	18	11	2	0	31	97
Bus Enter Leg	0	19	0	0	19	0	0	0	0	0	0	10	0	0	10	9	19	0	0	28	57
Total Entering Leg	0	797	0	0	797	0	0	0	0	0	2	859	0	0	861	922	543	13	0	1478	3136



PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



**Cars, Heavy Vehicles, and Buses (Combined)**

	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
	Cars Exiting Leg	823					515					1644					0				
Heavy Exiting Leg	39					11					47					0					97
Buses Exiting Leg	10					19					28					0					57
Total Exiting Leg	872					545					1719					0					3136

PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars

	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	197	0	0	197	0	0	0	0	0	2	184	0	0	186	253	116	1	0	370	753
3:45 PM	0	211	0	0	211	0	0	0	0	0	0	209	0	0	209	217	104	2	0	323	743
Total	0	408	0	0	408	0	0	0	0	0	2	393	0	0	395	470	220	3	0	693	1496
4:00 PM	0	163	0	0	163	0	0	0	0	0	0	215	0	0	215	209	151	6	0	366	744
4:15 PM	0	178	0	0	178	0	0	0	0	0	0	204	0	0	204	216	142	2	0	360	742
4:30 PM	0	190	0	0	190	0	0	0	0	0	3	172	0	0	175	225	127	0	0	352	717
4:45 PM	0	192	0	0	192	0	0	0	0	0	2	216	0	0	218	206	138	3	0	347	757
Total	0	723	0	0	723	0	0	0	0	0	5	807	0	0	812	856	558	11	0	1425	2960
5:00 PM	0	170	0	0	170	0	0	0	0	0	2	228	0	0	230	218	119	1	0	338	738
5:15 PM	0	176	0	0	176	0	0	0	0	0	2	193	0	0	195	208	117	0	0	325	696
5:30 PM	0	174	0	0	174	0	0	0	0	0	1	190	0	0	191	202	114	0	0	316	681
5:45 PM	0	184	0	0	184	0	0	0	0	0	1	202	0	0	203	183	138	1	0	322	709
Total	0	704	0	0	704	0	0	0	0	0	6	813	0	0	819	811	488	2	0	1301	2824
6:00 PM	0	156	0	0	156	0	0	0	0	0	1	199	0	0	200	219	132	0	0	351	707
6:15 PM	0	141	0	0	141	0	0	0	0	0	0	204	0	0	204	210	129	0	0	339	684
Total	0	297	0	0	297	0	0	0	0	0	1	403	0	0	404	429	261	0	0	690	1391
Grand Total	0	2132	0	0	2132	0	0	0	0	0	14	2416	0	0	2430	2566	1527	16	0	4109	8671
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.6	99.4	0.0	0.0		62.4	37.2	0.4	0.0		
Total %	0.0	24.6	0.0	0.0	24.6	0.0	0.0	0.0	0.0	0.0	0.2	27.9	0.0	0.0	28.0	29.6	17.6	0.2	0.0	47.4	
Exiting Leg Total	2432					1541					4698					0					8671

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	197	0	0	197	0	0	0	0	0	2	184	0	0	186	253	116	1	0	370	753
3:45 PM	0	211	0	0	211	0	0	0	0	0	0	209	0	0	209	217	104	2	0	323	743
4:00 PM	0	163	0	0	163	0	0	0	0	0	0	215	0	0	215	209	151	6	0	366	744
4:15 PM	0	178	0	0	178	0	0	0	0	0	0	204	0	0	204	216	142	2	0	360	742
Total Volume	0	749	0	0	749	0	0	0	0	0	2	812	0	0	814	895	513	11	0	1419	2982
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.2	99.8	0.0	0.0		63.1	36.2	0.8	0.0		
PHF	0.000	0.887	0.000	0.000	0.887	0.000	0.000	0.000	0.000	0.000	0.250	0.944	0.000	0.000	0.947	0.884	0.849	0.458	0.000	0.959	0.990
Entering Leg	0	749	0	0	749	0	0	0	0	0	2	812	0	0	814	895	513	11	0	1419	2982
Exiting Leg	823					515					1644					0					2982
Total	1572					515					2458					1419					5964

PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	9	0	0	9	0	0	0	0	0	0	7	0	0	7	6	1	0	0	7	23
3:45 PM	0	4	0	0	4	0	0	0	0	0	0	9	0	0	9	4	4	0	0	8	21
Total	0	13	0	0	13	0	0	0	0	0	0	16	0	0	16	10	5	0	0	15	44
4:00 PM	0	8	0	0	8	0	0	0	0	0	0	8	0	0	8	3	2	1	0	6	22
4:15 PM	0	8	0	0	8	0	0	0	0	0	0	13	0	0	13	5	4	1	0	10	31
4:30 PM	0	9	0	0	9	0	0	0	0	0	0	10	0	0	10	3	1	0	0	4	23
4:45 PM	0	11	0	0	11	0	0	0	0	0	0	12	0	0	12	4	2	1	0	7	30
Total	0	36	0	0	36	0	0	0	0	0	0	43	0	0	43	15	9	3	0	27	106
5:00 PM	0	8	0	0	8	0	0	0	0	0	0	3	0	0	3	4	2	0	0	6	17
5:15 PM	0	9	0	0	9	0	0	0	0	0	0	10	0	0	10	3	1	0	0	4	23
5:30 PM	0	9	0	0	9	0	0	0	0	0	0	6	0	0	6	3	4	0	0	7	22
5:45 PM	0	8	0	0	8	0	0	0	0	0	0	5	0	0	5	6	3	0	0	9	22
Total	0	34	0	0	34	0	0	0	0	0	0	24	0	0	24	16	10	0	0	26	84
6:00 PM	0	7	0	0	7	0	0	0	0	0	0	4	0	0	4	1	1	0	0	2	13
6:15 PM	0	8	0	0	8	0	0	0	0	0	0	10	0	0	10	1	0	0	0	1	19
Total	0	15	0	0	15	0	0	0	0	0	0	14	0	0	14	2	1	0	0	3	32
Grand Total	0	98	0	0	98	0	0	0	0	0	0	97	0	0	97	43	25	3	0	71	266
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		60.6	35.2	4.2	0.0		
Total %	0.0	36.8	0.0	0.0	36.8	0.0	0.0	0.0	0.0	0.0	0.0	36.5	0.0	0.0	36.5	16.2	9.4	1.1	0.0	26.7	
Exiting Leg Total	100					25					141					0					266

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:00 PM	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	8	0	0	8	0	0	0	0	0	0	8	0	0	8	3	2	1	0	6	22
4:15 PM	0	8	0	0	8	0	0	0	0	0	0	13	0	0	13	5	4	1	0	10	31
4:30 PM	0	9	0	0	9	0	0	0	0	0	0	10	0	0	10	3	1	0	0	4	23
4:45 PM	0	11	0	0	11	0	0	0	0	0	0	12	0	0	12	4	2	1	0	7	30
Total Volume	0	36	0	0	36	0	0	0	0	0	0	43	0	0	43	15	9	3	0	27	106
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		55.6	33.3	11.1	0.0		
PHF	0.000	0.818	0.000	0.000	0.818	0.000	0.000	0.000	0.000	0.000	0.000	0.827	0.000	0.000	0.827	0.750	0.563	0.750	0.000	0.675	0.855
Entering Leg	0	36	0	0	36	0	0	0	0	0	0	43	0	0	43	15	9	3	0	27	106
Exiting Leg	46					9					51					0					106
Total	82					9					94					27					212

PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	3	1	0	0	4	13
3:45 PM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	3	1	0	0	4	9
Total	0	8	0	0	8	0	0	0	0	0	0	6	0	0	6	6	2	0	0	8	22
4:00 PM	0	8	0	0	8	0	0	0	0	0	0	3	0	0	3	1	10	0	0	11	22
4:15 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	2	7	0	0	9	13
4:30 PM	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	1	4	0	0	5	16
4:45 PM	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	3	0	0	3	10
Total	0	18	0	0	18	0	0	0	0	0	0	15	0	0	15	4	24	0	0	28	61
5:00 PM	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	2	0	0	0	2	11
5:15 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	4	3	0	0	7	10
5:30 PM	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	1	4	0	0	5	13
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	8	0	0	8	2	1	0	0	3	12
Total	0	11	0	0	11	0	0	0	0	0	0	18	0	0	18	9	8	0	0	17	46
6:00 PM	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	1	4	0	0	5	14
6:15 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	1	3	0	0	4	8
Total	0	6	0	0	6	0	0	0	0	0	0	7	0	0	7	2	7	0	0	9	22
Grand Total	0	43	0	0	43	0	0	0	0	0	0	46	0	0	46	21	41	0	0	62	151
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		33.9	66.1	0.0	0.0		
Total %	0.0	28.5	0.0	0.0	28.5	0.0	0.0	0.0	0.0	0.0	0.0	30.5	0.0	0.0	30.5	13.9	27.2	0.0	0.0	41.1	
Exiting Leg Total	46					41					64					0					151

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:00 PM	America Legion Hwy (Rt 60)					Rotary					Route 60/1A/16					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	8	0	0	8	0	0	0	0	0	0	3	0	0	3	1	10	0	0	11	22
4:15 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	2	7	0	0	9	13
4:30 PM	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	1	4	0	0	5	16
4:45 PM	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	3	0	0	3	10
Total Volume	0	18	0	0	18	0	0	0	0	0	0	15	0	0	15	4	24	0	0	28	61
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		14.3	85.7	0.0	0.0		
PHF	0.000	0.563	0.000	0.000	0.563	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.625	0.500	0.600	0.000	0.000	0.636	0.693
Entering Leg	0	18	0	0	18	0	0	0	0	0	0	15	0	0	15	4	24	0	0	28	61
Exiting Leg	15					24					22					0					61
Total	33					24					37					28					122

PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



### Bicycles (on Roadway and Crosswalks)

	America Legion Hwy (Rt 60)							Rotary							Route 60/1A/16							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0							0							0							0							0

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	America Legion Hwy (Rt 60)							Rotary							Route 60/1A/16							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0							0							0							0							0
Total	0							0							0							0							0

PDI File #: **175607 (13)**  
 Location: **N: America Legion Hwy (Rt 60) S: Route 60/1A/16**  
 Location: **E: Rotary W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Pedestrians

	America Legion Hwy (Rt 60)							Rotary							Route 60/1A/16							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2	
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2	0	2	0	0	0	0	0	0	4	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0			
Exiting Leg Total	0							2							2							0							4

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	America Legion Hwy (Rt 60)							Rotary							Route 60/1A/16							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Exiting Leg	0							2							0							0							2
Total	0							4							0							0							4

PDI File #: **175607 (14)**  
 Location: **N: Rotary S: Route 1A**  
 Location: **E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



**Cars, Heavy Vehicles, and Buses (Combined)**

	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				Total
	North					East					Southeast				South				West				
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	58	35	0	93	49	14	0	63	51	12	0	63	219
6:45 AM	0	0	0	0	0	0	0	0	0	0	79	29	0	108	51	19	0	70	56	7	0	63	241
Total	0	0	0	0	0	0	0	0	0	0	137	64	0	201	100	33	0	133	107	19	0	126	460
7:00 AM	0	0	0	0	0	0	0	0	0	0	81	25	0	106	56	27	0	83	92	10	0	102	291
7:15 AM	0	0	0	0	0	0	0	0	0	0	83	48	0	131	65	17	0	82	106	15	0	121	334
7:30 AM	0	0	0	0	0	0	0	0	0	0	93	33	0	126	67	21	0	88	114	28	0	142	356
7:45 AM	0	0	0	0	0	0	0	0	0	0	131	57	0	188	63	24	0	87	100	24	0	124	399
Total	0	0	0	0	0	0	0	0	0	0	388	163	0	551	251	89	0	340	412	77	0	489	1380
8:00 AM	0	0	0	0	0	0	0	0	0	0	115	38	0	153	81	26	0	107	102	18	0	120	380
8:15 AM	0	0	0	0	0	0	0	0	0	0	92	40	0	132	76	32	0	108	114	23	0	137	377
8:30 AM	0	0	0	0	0	0	0	0	0	0	108	53	0	161	67	21	0	88	83	20	0	103	352
8:45 AM	0	0	0	0	0	0	0	0	0	0	104	47	0	151	65	17	0	82	71	25	0	96	329
Total	0	0	0	0	0	0	0	0	0	0	419	178	0	597	289	96	0	385	370	86	0	456	1438
9:00 AM	0	0	0	0	0	0	0	0	0	0	94	47	0	141	60	27	0	87	65	20	0	85	313
9:15 AM	0	0	0	0	0	0	0	0	0	0	65	39	0	104	60	29	0	89	87	16	0	103	296
Total	0	0	0	0	0	0	0	0	0	0	159	86	0	245	120	56	0	176	152	36	0	188	609
Grand Total	0	0	0	0	0	0	0	0	0	0	1103	491	0	1594	760	274	0	1034	1041	218	0	1259	3887
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		69.2	30.8	0.0		73.5	26.5	0.0		82.7	17.3	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.4	12.6	0.0	41.0	19.6	7.0	0.0	26.6	26.8	5.6	0.0	32.4	
Exiting Leg Total	983					2904					0				0				0				3887
Cars	0	0	0	0	0	0	0	0	0	0	1045	460	0	1505	705	247	0	952	971	212	0	1183	3640
% Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.7	93.7	0.0	94.4	92.8	90.1	0.0	92.1	93.3	97.2	0.0	94.0	93.6
Exiting Leg Total	919					2721					0				0				0				3640
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	48	28	0	76	40	27	0	67	24	4	0	28	171
% Heavy Vehicles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	5.7	0.0	4.8	5.3	9.9	0.0	6.5	2.3	1.8	0.0	2.2	4.4
Exiting Leg Total	59					112					0				0				0				171
Buses	0	0	0	0	0	0	0	0	0	0	10	3	0	13	15	0	0	15	46	2	0	48	76
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.6	0.0	0.8	2.0	0.0	0.0	1.5	4.4	0.9	0.0	3.8	2.0
Exiting Leg Total	5					71					0				0				0				76

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:30 AM	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				
	North					East					Southeast				South				West				
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:30 AM	0	0	0	0	0	0	0	0	0	0	93	33	0	126	67	21	0	88	114	28	0	142	356
7:45 AM	0	0	0	0	0	0	0	0	0	0	131	57	0	188	63	24	0	87	100	24	0	124	399
8:00 AM	0	0	0	0	0	0	0	0	0	0	115	38	0	153	81	26	0	107	102	18	0	120	380
8:15 AM	0	0	0	0	0	0	0	0	0	0	92	40	0	132	76	32	0	108	114	23	0	137	377
Total Volume	0	0	0	0	0	0	0	0	0	0	431	168	0	599	287	103	0	390	430	93	0	523	1512
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		72.0	28.0	0.0		73.6	26.4	0.0		82.2	17.8	0.0		

PDI File #: **175607 (14)**  
 Location: **N: Rotary S: Route 1A**  
 Location: **E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				
	North					East					Southeast				South				West				
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.823	0.737	0.000	0.797	0.886	0.805	0.000	0.903	0.943	0.830	0.000	0.921	0.947
Cars	0	0	0	0	0	0	0	0	0	0	409	161	0	570	267	93	0	360	404	89	0	493	1423
Cars %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.9	95.8	0.0	95.2	93.0	90.3	0.0	92.3	94.0	95.7	0.0	94.3	94.1
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	17	7	0	24	14	10	0	24	12	2	0	14	62
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	4.2	0.0	4.0	4.9	9.7	0.0	6.2	2.8	2.2	0.0	2.7	4.1
Buses	0	0	0	0	0	0	0	0	0	0	5	0	0	5	6	0	0	6	14	2	0	16	27
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.8	2.1	0.0	0.0	1.5	3.3	2.2	0.0	3.1	1.8
Cars Enter Leg	0	0	0	0	0	0	0	0	0	0	409	161	0	570	267	93	0	360	404	89	0	493	1423
Heavy Enter Leg	0	0	0	0	0	0	0	0	0	0	17	7	0	24	14	10	0	24	12	2	0	14	62
Bus Enter Leg	0	0	0	0	0	0	0	0	0	0	5	0	0	5	6	0	0	6	14	2	0	16	27
Total Entering Leg	0	0	0	0	0	0	0	0	0	0	431	168	0	599	287	103	0	390	430	93	0	523	1512
Cars Exiting Leg					343					1080				0				0				0	1423
Heavy Exiting Leg					19					43				0				0				0	62
Buses Exiting Leg					2					25				0				0				0	27
Total Exiting Leg					364					1148				0				0				0	1512



PDI File #: **175607 (14)**  
 Location: **N: Rotary S: Route 1A**  
 Location: **E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars

	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				Total
	North					East					Southeast				South				West				
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	57	31	0	88	45	11	0	56	50	12	0	62	206
6:45 AM	0	0	0	0	0	0	0	0	0	0	74	27	0	101	48	17	0	65	54	7	0	61	227
Total	0	0	0	0	0	0	0	0	0	0	131	58	0	189	93	28	0	121	104	19	0	123	433
7:00 AM	0	0	0	0	0	0	0	0	0	0	75	25	0	100	53	24	0	77	85	10	0	95	272
7:15 AM	0	0	0	0	0	0	0	0	0	0	83	46	0	129	59	16	0	75	99	15	0	114	318
7:30 AM	0	0	0	0	0	0	0	0	0	0	88	33	0	121	62	19	0	81	106	27	0	133	335
7:45 AM	0	0	0	0	0	0	0	0	0	0	125	55	0	180	55	20	0	75	91	23	0	114	369
Total	0	0	0	0	0	0	0	0	0	0	371	159	0	530	229	79	0	308	381	75	0	456	1294
8:00 AM	0	0	0	0	0	0	0	0	0	0	110	37	0	147	78	24	0	102	99	16	0	115	364
8:15 AM	0	0	0	0	0	0	0	0	0	0	86	36	0	122	72	30	0	102	108	23	0	131	355
8:30 AM	0	0	0	0	0	0	0	0	0	0	103	47	0	150	62	20	0	82	73	20	0	93	325
8:45 AM	0	0	0	0	0	0	0	0	0	0	100	47	0	147	62	17	0	79	66	25	0	91	317
Total	0	0	0	0	0	0	0	0	0	0	399	167	0	566	274	91	0	365	346	84	0	430	1361
9:00 AM	0	0	0	0	0	0	0	0	0	0	82	41	0	123	54	23	0	77	57	19	0	76	276
9:15 AM	0	0	0	0	0	0	0	0	0	0	62	35	0	97	55	26	0	81	83	15	0	98	276
Total	0	0	0	0	0	0	0	0	0	0	144	76	0	220	109	49	0	158	140	34	0	174	552
Grand Total	0	0	0	0	0	0	0	0	0	0	1045	460	0	1505	705	247	0	952	971	212	0	1183	3640
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		69.4	30.6	0.0		74.1	25.9	0.0		82.1	17.9	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.7	12.6	0.0	41.3	19.4	6.8	0.0	26.2	26.7	5.8	0.0	32.5	
Exiting Leg Total	919					2721					0				0				0				3640

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:30 AM	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				Total				
	North					East					Southeast				South				West								
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total					
7:30 AM	0	0	0	0	0	0	0	0	0	0	88	33	0	121	62	19	0	81	106	27	0	133	335				
7:45 AM	0	0	0	0	0	0	0	0	0	0	125	55	0	180	55	20	0	75	91	23	0	114	369				
8:00 AM	0	0	0	0	0	0	0	0	0	0	110	37	0	147	78	24	0	102	99	16	0	115	364				
8:15 AM	0	0	0	0	0	0	0	0	0	0	86	36	0	122	72	30	0	102	108	23	0	131	355				
Total Volume	0	0	0	0	0	0	0	0	0	0	409	161	0	570	267	93	0	360	404	89	0	493	1423				
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		71.8	28.2	0.0		74.2	25.8	0.0		81.9	18.1	0.0						
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.818	0.732	0.000	0.792	0.856	0.775	0.000	0.882	0.935	0.824	0.000	0.927	0.964				
Entering Leg	0	0	0	0	0	0	0	0	0	0	409	161	0	570	267	93	0	360	404	89	0	493	1423				
Exiting Leg	343					1080					0				0				0				0				1423
Total	343					1080					570				360				493				2846				

PDI File #: **175607 (14)**  
 Location: **N: Rotary S: Route 1A**  
 Location: **E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				Total
	North					East					Southeast				South				West				
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	3	0	4	2	3	0	5	0	0	0	0	9
6:45 AM	0	0	0	0	0	0	0	0	0	0	4	2	0	6	3	2	0	5	0	0	0	0	11
Total	0	0	0	0	0	0	0	0	0	0	5	5	0	10	5	5	0	10	0	0	0	0	20
7:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	4	1	3	0	4	2	0	0	2	10
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	1	0	4	0	0	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	4	3	2	0	5	2	0	0	2	11
7:45 AM	0	0	0	0	0	0	0	0	0	0	3	2	0	5	6	4	0	10	4	0	0	4	19
Total	0	0	0	0	0	0	0	0	0	0	11	3	0	14	13	10	0	23	8	0	0	8	45
8:00 AM	0	0	0	0	0	0	0	0	0	0	4	1	0	5	2	2	0	4	2	2	0	4	13
8:15 AM	0	0	0	0	0	0	0	0	0	0	6	4	0	10	3	2	0	5	4	0	0	4	19
8:30 AM	0	0	0	0	0	0	0	0	0	0	5	5	0	10	5	1	0	6	4	0	0	4	20
8:45 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	4	3	0	0	3	3	0	0	3	10
Total	0	0	0	0	0	0	0	0	0	0	19	10	0	29	13	5	0	18	13	2	0	15	62
9:00 AM	0	0	0	0	0	0	0	0	0	0	10	6	0	16	5	4	0	9	3	1	0	4	29
9:15 AM	0	0	0	0	0	0	0	0	0	0	3	4	0	7	4	3	0	7	0	1	0	1	15
Total	0	0	0	0	0	0	0	0	0	0	13	10	0	23	9	7	0	16	3	2	0	5	44
Grand Total	0	0	0	0	0	0	0	0	0	0	48	28	0	76	40	27	0	67	24	4	0	28	171
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		63.2	36.8	0.0		59.7	40.3	0.0		85.7	14.3	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.1	16.4	0.0	44.4	23.4	15.8	0.0	39.2	14.0	2.3	0.0	16.4	
Exiting Leg Total	59					112					0				0				0				171

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:15 AM	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary					Total		
	North					East					Southeast				South				West							
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total				
8:15 AM	0	0	0	0	0	0	0	0	0	0	6	4	0	10	3	2	0	5	4	0	0	4	19			
8:30 AM	0	0	0	0	0	0	0	0	0	0	5	5	0	10	5	1	0	6	4	0	0	4	20			
8:45 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	4	3	0	0	3	3	0	0	3	10			
9:00 AM	0	0	0	0	0	0	0	0	0	0	10	6	0	16	5	4	0	9	3	1	0	4	29			
Total Volume	0	0	0	0	0	0	0	0	0	0	25	15	0	40	16	7	0	23	14	1	0	15	78			
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		62.5	37.5	0.0		69.6	30.4	0.0		93.3	6.7	0.0					
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.625	0.000	0.625	0.800	0.438	0.000	0.639	0.875	0.250	0.000	0.938	0.672			
Entering Leg	0	0	0	0	0	0	0	0	0	0	25	15	0	40	16	7	0	23	14	1	0	15	78			
Exiting Leg	23					55					0				0				0				78			
Total	23					55					40				23				15				156			

PDI File #: **175607 (14)**  
 Location: **N: Rotary S: Route 1A**  
 Location: **E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Buses

	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				Total
	North					East					Southeast				South				West				
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	2	1	0	0	1	4
6:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	0	0	2	3
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2	0	0	2	3	0	0	3	7
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	0	0	2	5	0	0	5	9
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	3	7	0	0	7	11
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	2	6	1	0	7	10
7:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	3	2	0	0	2	5	1	0	6	11
Total	0	0	0	0	0	0	0	0	0	0	6	1	0	7	9	0	0	9	23	2	0	25	41
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	1	0	0	1	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	2	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	6	0	0	6	7
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2	0	0	2	11	0	0	11	15
9:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	1	5	0	0	5	8
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	4	0	0	4	5
Total	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	0	0	2	9	0	0	9	13
Grand Total	0	0	0	0	0	0	0	0	0	0	10	3	0	13	15	0	0	15	46	2	0	48	76
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		76.9	23.1	0.0		100.0	0.0	0.0		95.8	4.2	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	3.9	0.0	17.1	19.7	0.0	0.0	19.7	60.5	2.6	0.0	63.2	
Exiting Leg Total	5					71					0				0				0				76

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary					Total		
	North					East					Southeast				South				West							
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total				
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	0	0	2	5	0	0	5	9			
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	3	7	0	0	7	11			
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	2	6	1	0	7	10			
7:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	3	2	0	0	2	5	1	0	6	11			
Total Volume	0	0	0	0	0	0	0	0	0	0	6	1	0	7	9	0	0	9	23	2	0	25	41			
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		85.7	14.3	0.0		100.0	0.0	0.0		92.0	8.0	0.0					
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.583	0.750	0.000	0.000	0.750	0.821	0.500	0.000	0.893	0.932			
Entering Leg	0	0	0	0	0	0	0	0	0	0	6	1	0	7	9	0	0	9	23	2	0	25	41			
Exiting Leg	3					38					0				0				0				41			
Total	3					38					7				9				25				82			

PDI File #: 175607 (14)  
Location: N: Rotary S: Route 1A  
Location: E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)  
City, State: Revere, MA  
Client: VHB/ A. Berthume  
Site Code: 13796.00  
Count Date: Tuesday, May 09, 2017  
Start Time: 6:30 AM  
End Time: 9:30 AM



Class:

Bicycles (on Roadway and Crosswalks)

	Rotary							Beach Street (1A)							Revere Beach Pkwy (Rt 16)							Route 1A							Rotary							Total
	North							East							Southeast							South							West							
	Right	Thru	Bear Left	U-Turn	CW-EB	CW-WB	Total	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	U-Turn	CW-SWB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total				
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1		
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1		
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1		
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0			
Exiting Leg Total	0							1							0							0							0							

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:30 AM	Rotary							Beach Street (1A)							Revere Beach Pkwy (Rt 16)							Route 1A							Rotary							Total
	North							East							Southeast							South							West							
	Right	Thru	Bear Left	U-Turn	CW-EB	CW-WB	Total	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	U-Turn	CW-SWB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total				
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1		
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1		
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250			
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1		
Exiting Leg	0							1							0							0							0							1
Total	0							1							0							1							0							2

PDI File #: 175607 (14)  
Location: N: Rotary S: Route 1A  
Location: E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)  
City, State: Revere, MA  
Client: VHB/ A. Berthume  
Site Code: 13796.00  
Count Date: Tuesday, May 09, 2017  
Start Time: 6:30 AM  
End Time: 9:30 AM



Class:

Pedestrians

	Rotary							Beach Street (1A)							Revere Beach Pkwy (Rt 16)							Route 1A							Rotary							Total
	North							East							Southeast							South							West							
	Right	Thru	Bear Left	U-Turn	CW-EB	CW-WB	Total	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	U-Turn	CW-SWB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total				
6:30 AM	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3			
6:45 AM	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4			
Total	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7			
7:00 AM	0	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4			
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:30 AM	0	0	0	0	2	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5			
7:45 AM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
Total	0	0	0	0	4	6	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10			
8:00 AM	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3			
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:30 AM	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2			
8:45 AM	0	0	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4			
Total	0	0	0	0	6	3	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9			
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:15 AM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
Total	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
Grand Total	0	0	0	0	11	16	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27			
Approach %	0.0	0.0	0.0	0.0	40.7	59.3		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0					
Total %	0.0	0.0	0.0	0.0	40.7	59.3	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Exiting Leg Total	27							0							0							0							0							27

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:45 AM	Rotary							Beach Street (1A)							Revere Beach Pkwy (Rt 16)							Route 1A							Rotary							Total
	North							East							Southeast							South							West							
	Right	Thru	Bear Left	U-Turn	CW-EB	CW-WB	Total	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	U-Turn	CW-SWB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total				
6:45 AM	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4			
7:00 AM	0	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4			
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:30 AM	0	0	0	0	2	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5			
Total Volume	0	0	0	0	3	10	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13			
% Approach Total	0.0	0.0	0.0	0.0	23.1	76.9		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0					
PHF	0.000	0.000	0.000	0.000	0.375	0.625	0.650	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.650				
Entering Leg	0	0	0	0	3	10	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13			
Exiting Leg	13							0							0							0							0							13
Total	26							0							0							0							0							26

PDI File #: **175607 (14)**  
 Location: **N: Rotary S: Route 1A**  
 Location: **E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



**Cars, Heavy Vehicles, and Buses (Combined)**

	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				Total
	North					East					Southeast				South				West				
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	161	67	0	228	89	34	0	123	113	19	0	132	483
3:45 PM	0	0	0	0	0	0	0	0	0	0	196	49	0	245	102	20	0	122	92	16	0	108	475
Total	0	0	0	0	0	0	0	0	0	0	357	116	0	473	191	54	0	245	205	35	0	240	958
4:00 PM	0	0	0	0	0	0	0	0	0	0	209	57	0	266	90	21	0	111	133	37	0	170	547
4:15 PM	0	0	0	0	0	0	0	0	0	0	173	56	0	229	110	28	0	138	132	27	0	159	526
4:30 PM	0	0	0	0	0	0	0	0	0	0	191	56	0	247	92	23	0	115	107	21	0	128	490
4:45 PM	0	0	0	0	0	0	0	0	0	0	191	65	0	256	91	20	0	111	127	15	0	142	509
Total	0	0	0	0	0	0	0	0	0	0	764	234	0	998	383	92	0	475	499	100	0	599	2072
5:00 PM	0	0	0	0	0	0	0	0	0	0	217	74	0	291	125	21	0	146	103	19	0	122	559
5:15 PM	0	0	0	0	0	0	0	0	0	0	185	70	0	255	82	26	0	108	109	9	0	118	481
5:30 PM	0	0	0	0	0	0	0	0	0	0	199	63	0	262	69	26	0	95	105	15	0	120	477
5:45 PM	0	0	0	0	0	0	0	0	0	0	177	65	0	242	79	18	0	97	112	22	0	134	473
Total	0	0	0	0	0	0	0	0	0	0	778	272	0	1050	355	91	0	446	429	65	0	494	1990
6:00 PM	0	0	0	0	0	0	0	0	0	0	163	54	0	217	106	16	0	122	123	15	0	138	477
6:15 PM	0	0	0	0	0	0	0	0	0	0	154	53	0	207	107	19	0	126	114	16	0	130	463
Total	0	0	0	0	0	0	0	0	0	0	317	107	0	424	213	35	0	248	237	31	0	268	940
Grand Total	0	0	0	0	0	0	0	0	0	0	2216	729	0	2945	1142	272	0	1414	1370	231	0	1601	5960
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		75.2	24.8	0.0		80.8	19.2	0.0		85.6	14.4	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.2	12.2	0.0	49.4	19.2	4.6	0.0	23.7	23.0	3.9	0.0	26.9	
Exiting Leg Total	1232					4728					0				0				0				5960
Cars	0	0	0	0	0	0	0	0	0	0	2171	719	0	2890	1080	267	0	1347	1316	226	0	1542	5779
% Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.0	98.6	0.0	98.1	94.6	98.2	0.0	95.3	96.1	97.8	0.0	96.3	97.0
Exiting Leg Total	1212					4567					0				0				0				5779
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	37	9	0	46	52	5	0	57	14	5	0	19	122
% Heavy Vehicles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.2	0.0	1.6	4.6	1.8	0.0	4.0	1.0	2.2	0.0	1.2	2.0
Exiting Leg Total	19					103					0				0				0				122
Buses	0	0	0	0	0	0	0	0	0	0	8	1	0	9	10	0	0	10	40	0	0	40	59
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.0	0.3	0.9	0.0	0.0	0.7	2.9	0.0	0.0	2.5	1.0
Exiting Leg Total	1					58					0				0				0				59

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:15 PM	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				Total
	North					East					Southeast				South				West				
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:15 PM	0	0	0	0	0	0	0	0	0	0	173	56	0	229	110	28	0	138	132	27	0	159	526
4:30 PM	0	0	0	0	0	0	0	0	0	0	191	56	0	247	92	23	0	115	107	21	0	128	490
4:45 PM	0	0	0	0	0	0	0	0	0	0	191	65	0	256	91	20	0	111	127	15	0	142	509
5:00 PM	0	0	0	0	0	0	0	0	0	0	217	74	0	291	125	21	0	146	103	19	0	122	559
Total Volume	0	0	0	0	0	0	0	0	0	0	772	251	0	1023	418	92	0	510	469	82	0	551	2084
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		75.5	24.5	0.0		82.0	18.0	0.0		85.1	14.9	0.0		

PDI File #: **175607 (14)**  
 Location: **N: Rotary S: Route 1A**  
 Location: **E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

		Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary					Total
		North					East					Southeast				South				West					
		Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total		
PHF		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.889	0.848	0.000	0.879	0.836	0.821	0.000	0.873	0.888	0.759	0.000	0.866	0.932	
Cars		0	0	0	0	0	0	0	0	0	0	759	245	0	1004	398	91	0	489	450	81	0	531	2024	
Cars %		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.3	97.6	0.0	98.1	95.2	98.9	0.0	95.9	95.9	98.8	0.0	96.4	97.1	
Heavy Vehicles		0	0	0	0	0	0	0	0	0	0	11	6	0	17	19	1	0	20	6	1	0	7	44	
Heavy Vehicles %		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.4	0.0	1.7	4.5	1.1	0.0	3.9	1.3	1.2	0.0	1.3	2.1	
Buses		0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	1	13	0	0	13	16	
Buses %		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2	0.2	0.0	0.0	0.2	2.8	0.0	0.0	2.4	0.8	
Cars Enter Leg		0	0	0	0	0	0	0	0	0	0	759	245	0	1004	398	91	0	489	450	81	0	531	2024	
Heavy Enter Leg		0	0	0	0	0	0	0	0	0	0	11	6	0	17	19	1	0	20	6	1	0	7	44	
Bus Enter Leg		0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	1	13	0	0	13	16	
Total Entering Leg		0	0	0	0	0	0	0	0	0	0	772	251	0	1023	418	92	0	510	469	82	0	551	2084	
Cars Exiting Leg		417					1607					0				0				0					2024
Heavy Exiting Leg		8					36					0				0				0					44
Buses Exiting Leg		0					16					0				0				0					16
Total Exiting Leg		425					1659					0				0				0					2084

PDI File #: **175607 (14)**  
 Location: **N: Rotary S: Route 1A**  
 Location: **E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars

	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				Total
	North					East					Southeast				South				West				
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	155	67	0	222	83	34	0	117	111	19	0	130	469
3:45 PM	0	0	0	0	0	0	0	0	0	0	190	48	0	238	92	18	0	110	87	16	0	103	451
Total	0	0	0	0	0	0	0	0	0	0	345	115	0	460	175	52	0	227	198	35	0	233	920
4:00 PM	0	0	0	0	0	0	0	0	0	0	203	55	0	258	81	20	0	101	124	36	0	160	519
4:15 PM	0	0	0	0	0	0	0	0	0	0	169	54	0	223	100	27	0	127	123	27	0	150	500
4:30 PM	0	0	0	0	0	0	0	0	0	0	186	55	0	241	88	23	0	111	103	20	0	123	475
4:45 PM	0	0	0	0	0	0	0	0	0	0	188	63	0	251	90	20	0	110	122	15	0	137	498
Total	0	0	0	0	0	0	0	0	0	0	746	227	0	973	359	90	0	449	472	98	0	570	1992
5:00 PM	0	0	0	0	0	0	0	0	0	0	216	73	0	289	120	21	0	141	102	19	0	121	551
5:15 PM	0	0	0	0	0	0	0	0	0	0	183	70	0	253	78	26	0	104	105	9	0	114	471
5:30 PM	0	0	0	0	0	0	0	0	0	0	194	63	0	257	66	26	0	92	99	14	0	113	462
5:45 PM	0	0	0	0	0	0	0	0	0	0	175	65	0	240	75	17	0	92	111	20	0	131	463
Total	0	0	0	0	0	0	0	0	0	0	768	271	0	1039	339	90	0	429	417	62	0	479	1947
6:00 PM	0	0	0	0	0	0	0	0	0	0	160	54	0	214	102	16	0	118	118	15	0	133	465
6:15 PM	0	0	0	0	0	0	0	0	0	0	152	52	0	204	105	19	0	124	111	16	0	127	455
Total	0	0	0	0	0	0	0	0	0	0	312	106	0	418	207	35	0	242	229	31	0	260	920
Grand Total	0	0	0	0	0	0	0	0	0	0	2171	719	0	2890	1080	267	0	1347	1316	226	0	1542	5779
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		75.1	24.9	0.0		80.2	19.8	0.0		85.3	14.7	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.6	12.4	0.0	50.0	18.7	4.6	0.0	23.3	22.8	3.9	0.0	26.7	
Exiting Leg Total	1212					4567					0				0				0				5779

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:15 PM	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				Total			
	North					East					Southeast				South				West							
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total				
4:15 PM	0	0	0	0	0	0	0	0	0	0	169	54	0	223	100	27	0	127	123	27	0	150	500			
4:30 PM	0	0	0	0	0	0	0	0	0	0	186	55	0	241	88	23	0	111	103	20	0	123	475			
4:45 PM	0	0	0	0	0	0	0	0	0	0	188	63	0	251	90	20	0	110	122	15	0	137	498			
5:00 PM	0	0	0	0	0	0	0	0	0	0	216	73	0	289	120	21	0	141	102	19	0	121	551			
Total Volume	0	0	0	0	0	0	0	0	0	0	759	245	0	1004	398	91	0	489	450	81	0	531	2024			
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		75.6	24.4	0.0		81.4	18.6	0.0		84.7	15.3	0.0					
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.878	0.839	0.000	0.869	0.829	0.843	0.000	0.867	0.915	0.750	0.000	0.885	0.918			
Entering Leg	0	0	0	0	0	0	0	0	0	0	759	245	0	1004	398	91	0	489	450	81	0	531	2024			
Exiting Leg	417					1607					0				0				0				2024			
Total	417					1607					1004				489				531				4048			



PDI File #: **175607 (14)**  
 Location: **N: Rotary S: Route 1A**  
 Location: **E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				Total
	North					East					Southeast				South				West				
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	6	0	0	6	5	0	0	5	1	0	0	1	12
3:45 PM	0	0	0	0	0	0	0	0	0	0	3	1	0	4	10	2	0	12	4	0	0	4	20
Total	0	0	0	0	0	0	0	0	0	0	9	1	0	10	15	2	0	17	5	0	0	5	32
4:00 PM	0	0	0	0	0	0	0	0	0	0	5	1	0	6	9	1	0	10	0	1	0	1	17
4:15 PM	0	0	0	0	0	0	0	0	0	0	4	2	0	6	9	1	0	10	2	0	0	2	18
4:30 PM	0	0	0	0	0	0	0	0	0	0	4	1	0	5	4	0	0	4	1	1	0	2	11
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	4	1	0	0	1	2	0	0	2	7
Total	0	0	0	0	0	0	0	0	0	0	15	6	0	21	23	2	0	25	5	2	0	7	53
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	2	5	0	0	5	1	0	0	1	8
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	0	0	2	1	0	0	1	5
5:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	4	3	0	0	3	1	1	0	2	9
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	1	0	3	0	2	0	2	6
Total	0	0	0	0	0	0	0	0	0	0	8	1	0	9	12	1	0	13	3	3	0	6	28
6:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	3	2	0	0	2	1	0	0	1	6
6:15 PM	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	3
Total	0	0	0	0	0	0	0	0	0	0	5	1	0	6	2	0	0	2	1	0	0	1	9
Grand Total	0	0	0	0	0	0	0	0	0	0	37	9	0	46	52	5	0	57	14	5	0	19	122
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		80.4	19.6	0.0		91.2	8.8	0.0		73.7	26.3	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.3	7.4	0.0	37.7	42.6	4.1	0.0	46.7	11.5	4.1	0.0	15.6	
Exiting Leg Total	19					103					0				0				0				122

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				Total			
	North					East					Southeast				South				West							
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total				
3:30 PM	0	0	0	0	0	0	0	0	0	0	6	0	0	6	5	0	0	5	1	0	0	1	12			
3:45 PM	0	0	0	0	0	0	0	0	0	0	3	1	0	4	10	2	0	12	4	0	0	4	20			
4:00 PM	0	0	0	0	0	0	0	0	0	0	5	1	0	6	9	1	0	10	0	1	0	1	17			
4:15 PM	0	0	0	0	0	0	0	0	0	0	4	2	0	6	9	1	0	10	2	0	0	2	18			
Total Volume	0	0	0	0	0	0	0	0	0	0	18	4	0	22	33	4	0	37	7	1	0	8	67			
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		81.8	18.2	0.0		89.2	10.8	0.0		87.5	12.5	0.0					
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.500	0.000	0.917	0.825	0.500	0.000	0.771	0.438	0.250	0.000	0.500	0.838			
Entering Leg	0	0	0	0	0	0	0	0	0	0	18	4	0	22	33	4	0	37	7	1	0	8	67			
Exiting Leg	9					58					0				0				0				67			
Total	9					58					22				37				8				134			

PDI File #: **175607 (14)**  
 Location: **N: Rotary S: Route 1A**  
 Location: **E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary				Total
	North					East					Southeast				South				West				
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	1	0	0	1	4
Total	0	0	0	0	0	0	0	0	0	0	3	0	0	3	1	0	0	1	2	0	0	2	6
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	9	0	0	9	11
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	7	0	0	7	8
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	3	0	0	3	4
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	3	0	0	3	4
Total	0	0	0	0	0	0	0	0	0	0	3	1	0	4	1	0	0	1	22	0	0	22	27
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	3	0	0	3	5
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	5	0	0	5	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	2	1	0	0	1	4
Total	0	0	0	0	0	0	0	0	0	0	2	0	0	2	4	0	0	4	9	0	0	9	15
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	4	0	0	4	6
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	3	0	0	3	5
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	7	0	0	7	11
Grand Total	0	0	0	0	0	0	0	0	0	0	8	1	0	9	10	0	0	10	40	0	0	40	59
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		88.9	11.1	0.0		100.0	0.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	1.7	0.0	15.3	16.9	0.0	0.0	16.9	67.8	0.0	0.0	67.8	
Exiting Leg Total	1					58					0				0				0				59

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Rotary					Beach Street (1A)					Revere Beach Pkwy (Rt 16)				Route 1A				Rotary					Total		
	North					East					Southeast				South				West							
	Right	Thru	Bear Left	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total				
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	2			
3:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	1	0	0	1	4			
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	9	0	0	9	11			
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	7	0	0	7	8			
Total Volume	0	0	0	0	0	0	0	0	0	0	4	1	0	5	2	0	0	2	18	0	0	18	25			
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		80.0	20.0	0.0		100.0	0.0	0.0		100.0	0.0	0.0					
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.333	0.250	0.000	0.417	0.500	0.000	0.000	0.500	0.500	0.000	0.000	0.500	0.568			
Entering Leg	0	0	0	0	0	0	0	0	0	0	4	1	0	5	2	0	0	2	18	0	0	18	25			
Exiting Leg	1					24					0				0				0				25			
Total	1					24					5				2				18				50			

PDI File #: **175607 (14)**  
 Location: **N: Rotary S: Route 1A**  
 Location: **E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



Class:

**Bicycles (on Roadway and Crosswalks)**

	Rotary							Beach Street (1A)							Revere Beach Pkwy (Rt 16)							Route 1A							Rotary							Total
	North							East							Southeast							South							West							
	Right	Thru	Bear Left	U-Turn	CW-EB	CW-WB	Total	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	U-Turn	CW-SWB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total				
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:30 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
6:15 PM	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3			
Total	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3			
Grand Total	0	0	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4			
Approach %	0.0	0.0	0.0	0.0	75.0	25.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0					
Total %	0.0	0.0	0.0	0.0	75.0	25.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Exiting Leg Total	4							0							0							0							0							

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

5:30 PM	Rotary							Beach Street (1A)							Revere Beach Pkwy (Rt 16)							Route 1A							Rotary							Total
	North							East							Southeast							South							West							
	Right	Thru	Bear Left	U-Turn	CW-EB	CW-WB	Total	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	U-Turn	CW-SWB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total				
5:30 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
6:15 PM	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3				
Total Volume	0	0	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4				
% Approach Total	0.0	0.0	0.0	0.0	75.0	25.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0					
PHF	0.000	0.000	0.000	0.000	0.250	0.250	0.333	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.333				
Entering Leg	0	0	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4				
Exiting Leg	4							0							0							0							0							4
Total	8							0							0							0							0							8

PDI File #: **175607 (14)**  
 Location: **N: Rotary S: Route 1A**  
 Location: **E: Beach Street (1A) W: Rotary SE: Revere Beach Pkwy (Rt 16)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



Class:

### Pedestrians

	Rotary							Beach Street (1A)							Revere Beach Pkwy (Rt 16)							Route 1A							Rotary							Total
	North							East							Southeast							South							West							
	Right	Thru	Bear Left	U-Turn	CW-EB	CW-WB	Total	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	U-Turn	CW-SWB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total				
3:30 PM	0	0	0	0	5	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6			
3:45 PM	0	0	0	0	3	6	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9			
Total	0	0	0	0	8	7	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15			
4:00 PM	0	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	7			
4:15 PM	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3			
4:30 PM	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3			
4:45 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
Total	0	0	0	0	2	9	11	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2	2	14			
5:00 PM	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7			
5:15 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
5:30 PM	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2			
5:45 PM	0	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4			
Total	0	0	0	0	2	12	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14			
6:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
6:15 PM	0	0	0	0	2	6	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8			
Total	0	0	0	0	3	6	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9			
Grand Total	0	0	0	0	15	34	49	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2	2	52			
Approach %	0.0	0.0	0.0	0.0	30.6	69.4		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0					
Total %	0.0	0.0	0.0	0.0	28.8	65.4	94.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	3.8					
Exiting Leg Total	49							0							1							0							2							52

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Rotary							Beach Street (1A)							Revere Beach Pkwy (Rt 16)							Route 1A							Rotary							
	North							East							Southeast							South							West							
	Right	Thru	Bear Left	U-Turn	CW-EB	CW-WB	Total	Thru	Left	Hard Left	U-Turn	CW-SB	CW-NB	Total	Hard Right	Bear Right	U-Turn	CW-SWB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total				
3:30 PM	0	0	0	0	5	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6			
3:45 PM	0	0	0	0	3	6	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9				
4:00 PM	0	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	7				
4:15 PM	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3				
Total Volume	0	0	0	0	9	14	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	25				
% Approach Total	0.0	0.0	0.0	0.0	39.1	60.9		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0					
PHF	0.000	0.000	0.000	0.000	0.450	0.583	0.639	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250		0.694				
Entering Leg	0	0	0	0	9	14	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	25				
Exiting Leg	23							0							0							0							2							25
Total	46							0							0							0							4							50

PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	14	0	0	0	14	2	318	0	0	320	0	15	46	0	61	0	0	0	0	0	395
6:45 AM	12	0	0	0	12	1	260	0	0	261	0	12	44	0	56	0	0	0	0	0	329
Total	26	0	0	0	26	3	578	0	0	581	0	27	90	0	117	0	0	0	0	0	724
7:00 AM	6	0	0	0	6	5	287	0	0	292	0	10	53	0	63	0	0	0	0	0	361
7:15 AM	4	0	0	0	4	1	263	0	0	264	0	13	62	0	75	1	0	0	0	1	344
7:30 AM	9	0	0	0	9	6	244	0	0	250	0	21	64	0	85	0	0	0	0	0	344
7:45 AM	15	0	0	0	15	5	226	0	0	231	0	25	77	0	102	0	0	0	0	0	348
Total	34	0	0	0	34	17	1020	0	0	1037	0	69	256	0	325	1	0	0	0	1	1397
8:00 AM	17	0	0	0	17	8	214	0	0	222	0	27	65	0	92	0	0	0	0	0	331
8:15 AM	26	0	0	0	26	6	282	0	0	288	0	29	66	0	95	0	0	0	0	0	409
8:30 AM	24	0	0	0	24	4	269	0	0	273	0	21	72	0	93	0	0	0	0	0	390
8:45 AM	30	0	0	0	30	11	272	0	0	283	0	43	46	0	89	0	0	0	0	0	402
Total	97	0	0	0	97	29	1037	0	0	1066	0	120	249	0	369	0	0	0	0	0	1532
9:00 AM	51	0	0	0	51	10	215	0	0	225	0	34	59	0	93	0	0	0	0	0	369
9:15 AM	46	0	0	0	46	9	253	0	0	262	0	35	52	0	87	0	0	0	0	0	395
Total	97	0	0	0	97	19	468	0	0	487	0	69	111	0	180	0	0	0	0	0	764
Grand Total	254	0	0	0	254	68	3103	0	0	3171	0	285	706	0	991	1	0	0	0	1	4417
Approach %	100.0	0.0	0.0	0.0		2.1	97.9	0.0	0.0		0.0	28.8	71.2	0.0		100.0	0.0	0.0	0.0		
Total %	5.8	0.0	0.0	0.0	5.8	1.5	70.3	0.0	0.0	71.8	0.0	6.5	16.0	0.0	22.4	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	353					0					1					4063					4417
Cars	239	0	0	0	239	67	2939	0	0	3006	0	278	644	0	922	1	0	0	0	1	4168
% Cars	94.1	0.0	0.0	0.0	94.1	98.5	94.7	0.0	0.0	94.8	0.0	97.5	91.2	0.0	93.0	100.0	0.0	0.0	0.0	100.0	94.4
Exiting Leg Total	345					0					1					3822					4168
Heavy Vehicles	4	0	0	0	4	1	114	0	0	115	0	7	56	0	63	0	0	0	0	0	182
% Heavy Vehicles	1.6	0.0	0.0	0.0	1.6	1.5	3.7	0.0	0.0	3.6	0.0	2.5	7.9	0.0	6.4	0.0	0.0	0.0	0.0	0.0	4.1
Exiting Leg Total	8					0					0					174					182
Buses	11	0	0	0	11	0	50	0	0	50	0	0	6	0	6	0	0	0	0	0	67
% Buses	4.3	0.0	0.0	0.0	4.3	0.0	1.6	0.0	0.0	1.6	0.0	0.0	0.8	0.0	0.6	0.0	0.0	0.0	0.0	0.0	1.5
Exiting Leg Total	0					0					0					67					67

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:15 AM	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:15 AM	26	0	0	0	26	6	282	0	0	288	0	29	66	0	95	0	0	0	0	0	409
8:30 AM	24	0	0	0	24	4	269	0	0	273	0	21	72	0	93	0	0	0	0	0	390
8:45 AM	30	0	0	0	30	11	272	0	0	283	0	43	46	0	89	0	0	0	0	0	402
9:00 AM	51	0	0	0	51	10	215	0	0	225	0	34	59	0	93	0	0	0	0	0	369
Total Volume	131	0	0	0	131	31	1038	0	0	1069	0	127	243	0	370	0	0	0	0	0	1570
% Approach Total	100.0	0.0	0.0	0.0		2.9	97.1	0.0	0.0		0.0	34.3	65.7	0.0		0.0	0.0	0.0	0.0		
PHF	0.642	0.000	0.000	0.000	0.642	0.705	0.920	0.000	0.000	0.928	0.000	0.738	0.844	0.000	0.974	0.000	0.000	0.000	0.000	0.000	0.960
Cars	125	0	0	0	125	31	991	0	0	1022	0	127	219	0	346	0	0	0	0	0	1493
Cars %	95.4	0.0	0.0	0.0	95.4	100.0	95.5	0.0	0.0	95.6	0.0	100.0	90.1	0.0	93.5	0.0	0.0	0.0	0.0	0.0	95.1
Heavy Vehicles	2	0	0	0	2	0	28	0	0	28	0	0	23	0	23	0	0	0	0	0	53
Heavy Vehicles %	1.5	0.0	0.0	0.0	1.5	0.0	2.7	0.0	0.0	2.6	0.0	0.0	9.5	0.0	6.2	0.0	0.0	0.0	0.0	0.0	3.4
Buses	4	0	0	0	4	0	19	0	0	19	0	0	1	0	1	0	0	0	0	0	24
Buses %	3.1	0.0	0.0	0.0	3.1	0.0	1.8	0.0	0.0	1.8	0.0	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.0	0.0	1.5
Cars Enter Leg	125	0	0	0	125	31	991	0	0	1022	0	127	219	0	346	0	0	0	0	0	1493
Heavy Enter Leg	2	0	0	0	2	0	28	0	0	28	0	0	23	0	23	0	0	0	0	0	53
Bus Enter Leg	4	0	0	0	4	0	19	0	0	19	0	0	1	0	1	0	0	0	0	0	24
Total Entering Leg	131	0	0	0	131	31	1038	0	0	1069	0	127	243	0	370	0	0	0	0	0	1570
Cars Exiting Leg	158					0					0					1335					1493

PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



**Cars, Heavy Vehicles, and Buses (Combined)**

	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
Heavy Exiting Leg	0					0					0					53					53
Buses Exiting Leg	0					0					0					24					24
Total Exiting Leg	158					0					0					1412					1570

PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars

	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	13	0	0	0	13	2	298	0	0	300	0	13	40	0	53	0	0	0	0	0	366
6:45 AM	10	0	0	0	10	1	241	0	0	242	0	12	40	0	52	0	0	0	0	0	304
Total	23	0	0	0	23	3	539	0	0	542	0	25	80	0	105	0	0	0	0	0	670
7:00 AM	5	0	0	0	5	5	276	0	0	281	0	10	49	0	59	0	0	0	0	0	345
7:15 AM	4	0	0	0	4	1	244	0	0	245	0	12	59	0	71	1	0	0	0	1	321
7:30 AM	8	0	0	0	8	6	228	0	0	234	0	21	61	0	82	0	0	0	0	0	324
7:45 AM	13	0	0	0	13	5	218	0	0	223	0	25	69	0	94	0	0	0	0	0	330
Total	30	0	0	0	30	17	966	0	0	983	0	68	238	0	306	1	0	0	0	1	1320
8:00 AM	15	0	0	0	15	7	205	0	0	212	0	24	62	0	86	0	0	0	0	0	313
8:15 AM	24	0	0	0	24	6	271	0	0	277	0	29	60	0	89	0	0	0	0	0	390
8:30 AM	23	0	0	0	23	4	259	0	0	263	0	21	65	0	86	0	0	0	0	0	372
8:45 AM	29	0	0	0	29	11	257	0	0	268	0	43	46	0	89	0	0	0	0	0	386
Total	91	0	0	0	91	28	992	0	0	1020	0	117	233	0	350	0	0	0	0	0	1461
9:00 AM	49	0	0	0	49	10	204	0	0	214	0	34	48	0	82	0	0	0	0	0	345
9:15 AM	46	0	0	0	46	9	238	0	0	247	0	34	45	0	79	0	0	0	0	0	372
Total	95	0	0	0	95	19	442	0	0	461	0	68	93	0	161	0	0	0	0	0	717
Grand Total	239	0	0	0	239	67	2939	0	0	3006	0	278	644	0	922	1	0	0	0	1	4168
Approach %	100.0	0.0	0.0	0.0		2.2	97.8	0.0	0.0		0.0	30.2	69.8	0.0		100.0	0.0	0.0	0.0		
Total %	5.7	0.0	0.0	0.0	5.7	1.6	70.5	0.0	0.0	72.1	0.0	6.7	15.5	0.0	22.1	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	345					0					1					3822					4168

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:15 AM	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:15 AM	24	0	0	0	24	6	271	0	0	277	0	29	60	0	89	0	0	0	0	0	390
8:30 AM	23	0	0	0	23	4	259	0	0	263	0	21	65	0	86	0	0	0	0	0	372
8:45 AM	29	0	0	0	29	11	257	0	0	268	0	43	46	0	89	0	0	0	0	0	386
9:00 AM	49	0	0	0	49	10	204	0	0	214	0	34	48	0	82	0	0	0	0	0	345
Total Volume	125	0	0	0	125	31	991	0	0	1022	0	127	219	0	346	0	0	0	0	0	1493
% Approach Total	100.0	0.0	0.0	0.0		3.0	97.0	0.0	0.0		0.0	36.7	63.3	0.0		0.0	0.0	0.0	0.0		
PHF	0.638	0.000	0.000	0.000	0.638	0.705	0.914	0.000	0.000	0.922	0.000	0.738	0.842	0.000	0.972	0.000	0.000	0.000	0.000	0.000	0.957
Entering Leg	125	0	0	0	125	31	991	0	0	1022	0	127	219	0	346	0	0	0	0	0	1493
Exiting Leg	158					0					0					1335					1493
Total	283					1022					346					1335					2986

PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	0	0	0	0	0	15	0	0	15	0	2	5	0	7	0	0	0	0	0	22
6:45 AM	1	0	0	0	1	0	16	0	0	16	0	0	4	0	4	0	0	0	0	0	21
Total	1	0	0	0	1	0	31	0	0	31	0	2	9	0	11	0	0	0	0	0	43
7:00 AM	0	0	0	0	0	0	7	0	0	7	0	0	4	0	4	0	0	0	0	0	11
7:15 AM	0	0	0	0	0	0	14	0	0	14	0	1	2	0	3	0	0	0	0	0	17
7:30 AM	0	0	0	0	0	0	12	0	0	12	0	0	2	0	2	0	0	0	0	0	14
7:45 AM	1	0	0	0	1	0	6	0	0	6	0	0	6	0	6	0	0	0	0	0	13
Total	1	0	0	0	1	0	39	0	0	39	0	1	14	0	15	0	0	0	0	0	55
8:00 AM	0	0	0	0	0	1	7	0	0	8	0	3	3	0	6	0	0	0	0	0	14
8:15 AM	1	0	0	0	1	0	7	0	0	7	0	0	6	0	6	0	0	0	0	0	14
8:30 AM	0	0	0	0	0	0	7	0	0	7	0	0	6	0	6	0	0	0	0	0	13
8:45 AM	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	9
Total	2	0	0	0	2	1	29	0	0	30	0	3	15	0	18	0	0	0	0	0	50
9:00 AM	0	0	0	0	0	0	6	0	0	6	0	0	11	0	11	0	0	0	0	0	17
9:15 AM	0	0	0	0	0	0	9	0	0	9	0	1	7	0	8	0	0	0	0	0	17
Total	0	0	0	0	0	0	15	0	0	15	0	1	18	0	19	0	0	0	0	0	34
Grand Total	4	0	0	0	4	1	114	0	0	115	0	7	56	0	63	0	0	0	0	0	182
Approach %	100.0	0.0	0.0	0.0		0.9	99.1	0.0	0.0		0.0	11.1	88.9	0.0		0.0	0.0	0.0	0.0		
Total %	2.2	0.0	0.0	0.0	2.2	0.5	62.6	0.0	0.0	63.2	0.0	3.8	30.8	0.0	34.6	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	8					0					0					174					182

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:30 AM	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	0	0	0	0	0	15	0	0	15	0	2	5	0	7	0	0	0	0	0	22
6:45 AM	1	0	0	0	1	0	16	0	0	16	0	0	4	0	4	0	0	0	0	0	21
7:00 AM	0	0	0	0	0	0	7	0	0	7	0	0	4	0	4	0	0	0	0	0	11
7:15 AM	0	0	0	0	0	0	14	0	0	14	0	1	2	0	3	0	0	0	0	0	17
Total Volume	1	0	0	0	1	0	52	0	0	52	0	3	15	0	18	0	0	0	0	0	71
% Approach Total	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	16.7	83.3	0.0		0.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.000	0.813	0.000	0.000	0.813	0.000	0.375	0.750	0.000	0.643	0.000	0.000	0.000	0.000	0.000	0.807
Entering Leg	1	0	0	0	1	0	52	0	0	52	0	3	15	0	18	0	0	0	0	0	71
Exiting Leg	3					0					0					68					71
Total	4					52					18					68					142



PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Buses

	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	1	0	0	0	1	0	5	0	0	5	0	0	1	0	1	0	0	0	0	0	7
6:45 AM	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	4
Total	2	0	0	0	2	0	8	0	0	8	0	0	1	0	1	0	0	0	0	0	11
7:00 AM	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	5
7:15 AM	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	0	0	0	0	0	6
7:30 AM	1	0	0	0	1	0	4	0	0	4	0	0	1	0	1	0	0	0	0	0	6
7:45 AM	1	0	0	0	1	0	2	0	0	2	0	0	2	0	2	0	0	0	0	0	5
Total	3	0	0	0	3	0	15	0	0	15	0	0	4	0	4	0	0	0	0	0	22
8:00 AM	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	4
8:15 AM	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	5
8:30 AM	1	0	0	0	1	0	3	0	0	3	0	0	1	0	1	0	0	0	0	0	5
8:45 AM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	7
Total	4	0	0	0	4	0	16	0	0	16	0	0	1	0	1	0	0	0	0	0	21
9:00 AM	2	0	0	0	2	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	7
9:15 AM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	6
Total	2	0	0	0	2	0	11	0	0	11	0	0	0	0	0	0	0	0	0	0	13
Grand Total	11	0	0	0	11	0	50	0	0	50	0	0	6	0	6	0	0	0	0	0	67
Approach %	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		
Total %	16.4	0.0	0.0	0.0	16.4	0.0	74.6	0.0	0.0	74.6	0.0	0.0	9.0	0.0	9.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0					0					0					67					67

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:30 AM	1	0	0	0	1	0	3	0	0	3	0	0	1	0	1	0	0	0	0	0	5
8:45 AM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	7
9:00 AM	2	0	0	0	2	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	7
9:15 AM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	6
Total Volume	3	0	0	0	3	0	21	0	0	21	0	0	1	0	1	0	0	0	0	0	25
% Approach Total	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.375	0.000	0.000	0.000	0.375	0.000	0.750	0.000	0.000	0.750	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.893
Entering Leg	3	0	0	0	3	0	21	0	0	21	0	0	1	0	1	0	0	0	0	0	25
Exiting Leg	0					0					0					25					25
Total	3					21					1					25					50

PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Bicycles (on Roadway and Crosswalks)

	Everett Street							Beach Street (1A)							Rotary							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:00 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2	0	0	0	0	0	2	0	1	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	4	0
Approach %	100.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	50.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	25.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0							0							1							3							4

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:15 AM	Everett Street							Beach Street (1A)							Rotary							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total Volume	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
% Approach Total	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PHF	0.500	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	
Entering Leg	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Exiting Leg	0							0							0							2							2
Total	2							0							0							2							4

PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Pedestrians

	Everett Street							Beach Street (1A)							Rotary							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	0	5
6:45 AM	0	0	0	0	1	3	4	0	0	0	0	2	1	3	0	0	0	0	4	5	9	0	0	0	0	0	0	0	16
Total	0	0	0	0	1	4	5	0	0	0	0	2	1	3	0	0	0	0	7	6	13	0	0	0	0	0	0	0	21
7:00 AM	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	7	3	10	0	0	0	0	0	0	0	12
7:15 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1	3
7:30 AM	0	0	0	0	0	2	2	0	0	0	0	0	1	1	0	0	0	0	2	4	6	0	0	0	0	0	0	0	9
7:45 AM	0	0	0	0	0	2	2	0	0	0	0	2	0	2	0	0	0	0	2	3	5	0	0	0	0	0	0	0	9
Total	0	0	0	0	0	7	7	0	0	0	0	2	1	3	0	0	0	0	11	11	22	0	0	0	0	1	0	1	33
8:00 AM	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	5	5	10	0	0	0	0	0	0	0	10
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	16	0	0	0	0	0	0	0	8
8:30 AM	0	0	0	0	0	0	0	0	0	0	3	2	5	7	0	0	0	0	3	2	5	0	0	0	0	0	0	0	10
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	2	3	0	0	0	0	2	6	8	0	0	0	0	0	0	0	10
Total	0	0	0	0	0	5	5	0	0	0	0	4	3	7	0	0	0	0	5	21	26	0	0	0	0	0	0	0	38
9:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	2	3	0	0	0	0	1	4	5	0	0	0	0	0	0	0	7
9:15 AM	0	0	0	0	0	0	0	0	0	0	1	2	3	6	0	0	0	0	1	5	6	0	0	0	0	0	0	0	9
Total	0	0	0	0	0	0	0	0	0	0	2	3	5	9	0	0	0	0	2	9	11	0	0	0	0	0	0	0	16
Grand Total	0	0	0	0	1	16	17	0	0	0	0	10	8	18	0	0	0	0	25	47	72	0	0	0	0	1	0	1	108
Approach %	0.0	0.0	0.0	0.0	5.9	94.1		0.0	0.0	0.0	0.0	55.6	44.4		0.0	0.0	0.0	0.0	34.7	65.3		0.0	0.0	0.0	0.0	100.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.9	14.8	15.7	0.0	0.0	0.0	0.0	9.3	7.4	16.7	0.0	0.0	0.0	0.0	23.1	43.5	66.7	0.0	0.0	0.0	0.0	0.9	0.0	0.9	
Exiting Leg Total	17							18							72							1							108

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:45 AM	Everett Street							Beach Street (1A)							Rotary							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:45 AM	0	0	0	0	1	3	4	0	0	0	0	2	1	3	0	0	0	0	4	5	9	0	0	0	0	0	0	0	16
7:00 AM	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	7	3	10	0	0	0	0	0	0	0	12
7:15 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1	3
7:30 AM	0	0	0	0	0	2	2	0	0	0	0	0	1	1	0	0	0	0	2	4	6	0	0	0	0	0	0	0	9
Total Volume	0	0	0	0	1	8	9	0	0	0	0	2	2	4	0	0	0	0	13	13	26	0	0	0	0	1	0	1	40
% Approach Total	0.0	0.0	0.0	0.0	11.1	88.9		0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.250	0.667	0.563	0.000	0.000	0.000	0.000	0.250	0.500	0.333	0.000	0.000	0.000	0.000	0.464	0.650	0.650	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.625
Entering Leg	0	0	0	0	1	8	9	0	0	0	0	2	2	4	0	0	0	0	13	13	26	0	0	0	0	1	0	1	40
Exiting Leg	9							4							26							1							40
Total	18							8							52							2							80

PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	62	0	0	0	62	8	247	0	0	255	0	44	77	0	121	0	0	0	0	0	438
3:45 PM	49	0	0	0	49	1	230	0	0	231	0	27	56	0	83	0	0	0	0	0	363
Total	111	0	0	0	111	9	477	0	0	486	0	71	133	0	204	0	0	0	0	0	801
4:00 PM	52	0	0	0	52	3	225	0	0	228	0	47	70	0	117	0	0	0	0	0	397
4:15 PM	50	0	0	0	50	7	255	0	0	262	0	26	79	0	105	0	0	0	0	0	417
4:30 PM	57	0	0	0	57	1	260	0	0	261	0	22	75	0	97	0	0	0	0	0	415
4:45 PM	44	0	0	0	44	6	245	0	0	251	0	30	64	0	94	0	0	0	0	0	389
Total	203	0	0	0	203	17	985	0	0	1002	0	125	288	0	413	0	0	0	0	0	1618
5:00 PM	38	0	0	0	38	4	263	0	0	267	0	24	89	0	113	0	0	0	0	0	418
5:15 PM	39	0	0	0	39	5	239	0	0	244	0	21	82	0	103	0	0	0	0	0	386
5:30 PM	28	0	0	0	28	1	271	0	0	272	0	20	80	0	100	0	0	0	0	0	400
5:45 PM	24	0	0	0	24	4	253	0	0	257	0	25	74	0	99	0	0	0	0	0	380
Total	129	0	0	0	129	14	1026	0	0	1040	0	90	325	0	415	0	0	0	0	0	1584
6:00 PM	30	0	0	0	30	6	273	0	0	279	0	11	74	0	85	0	0	0	0	0	394
6:15 PM	27	0	0	0	27	3	249	0	0	252	0	19	72	0	91	0	0	0	0	0	370
Total	57	0	0	0	57	9	522	0	0	531	0	30	146	0	176	0	0	0	0	0	764
Grand Total	500	0	0	0	500	49	3010	0	0	3059	0	316	892	0	1208	0	0	0	0	0	4767
Approach %	100.0	0.0	0.0	0.0		1.6	98.4	0.0	0.0		0.0	26.2	73.8	0.0		0.0	0.0	0.0	0.0		
Total %	10.5	0.0	0.0	0.0	10.5	1.0	63.1	0.0	0.0	64.2	0.0	6.6	18.7	0.0	25.3	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	365					0					0					4402					4767
Cars	485	0	0	0	485	49	2924	0	0	2973	0	315	872	0	1187	0	0	0	0	0	4645
% Cars	97.0	0.0	0.0	0.0	97.0	100.0	97.1	0.0	0.0	97.2	0.0	99.7	97.8	0.0	98.3	0.0	0.0	0.0	0.0	0.0	97.4
Exiting Leg Total	364					0					0					4281					4645
Heavy Vehicles	4	0	0	0	4	0	43	0	0	43	0	1	19	0	20	0	0	0	0	0	67
% Heavy Vehicles	0.8	0.0	0.0	0.0	0.8	0.0	1.4	0.0	0.0	1.4	0.0	0.3	2.1	0.0	1.7	0.0	0.0	0.0	0.0	0.0	1.4
Exiting Leg Total	1					0					0					66					67
Buses	11	0	0	0	11	0	43	0	0	43	0	0	1	0	1	0	0	0	0	0	55
% Buses	2.2	0.0	0.0	0.0	2.2	0.0	1.4	0.0	0.0	1.4	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.2
Exiting Leg Total	0					0					0					55					55

### Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:15 PM	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:15 PM	50	0	0	0	50	7	255	0	0	262	0	26	79	0	105	0	0	0	0	0	417
4:30 PM	57	0	0	0	57	1	260	0	0	261	0	22	75	0	97	0	0	0	0	0	415
4:45 PM	44	0	0	0	44	6	245	0	0	251	0	30	64	0	94	0	0	0	0	0	389
5:00 PM	38	0	0	0	38	4	263	0	0	267	0	24	89	0	113	0	0	0	0	0	418
Total Volume	189	0	0	0	189	18	1023	0	0	1041	0	102	307	0	409	0	0	0	0	0	1639
% Approach Total	100.0	0.0	0.0	0.0		1.7	98.3	0.0	0.0		0.0	24.9	75.1	0.0		0.0	0.0	0.0	0.0		
PHF	0.829	0.000	0.000	0.000	0.829	0.643	0.972	0.000	0.000	0.975	0.000	0.850	0.862	0.000	0.905	0.000	0.000	0.000	0.000	0.000	0.980
Cars	184	0	0	0	184	18	986	0	0	1004	0	102	296	0	398	0	0	0	0	0	1586
Cars %	97.4	0.0	0.0	0.0	97.4	100.0	96.4	0.0	0.0	96.4	0.0	100.0	96.4	0.0	97.3	0.0	0.0	0.0	0.0	0.0	96.8
Heavy Vehicles	1	0	0	0	1	0	18	0	0	18	0	0	11	0	11	0	0	0	0	0	30
Heavy Vehicles %	0.5	0.0	0.0	0.0	0.5	0.0	1.8	0.0	0.0	1.7	0.0	0.0	3.6	0.0	2.7	0.0	0.0	0.0	0.0	0.0	1.8
Buses	4	0	0	0	4	0	19	0	0	19	0	0	0	0	0	0	0	0	0	0	23
Buses %	2.1	0.0	0.0	0.0	2.1	0.0	1.9	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Cars Enter Leg	184	0	0	0	184	18	986	0	0	1004	0	102	296	0	398	0	0	0	0	0	1586
Heavy Enter Leg	1	0	0	0	1	0	18	0	0	18	0	0	11	0	11	0	0	0	0	0	30
Bus Enter Leg	4	0	0	0	4	0	19	0	0	19	0	0	0	0	0	0	0	0	0	0	23
Total Entering Leg	189	0	0	0	189	18	1023	0	0	1041	0	102	307	0	409	0	0	0	0	0	1639

PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



**Cars, Heavy Vehicles, and Buses (Combined)**

	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
	Cars Exiting Leg	120					0					0					1466				
Heavy Exiting Leg	0					0					0					30					30
Buses Exiting Leg	0					0					0					23					23
Total Exiting Leg	120					0					0					1519					1639

PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars

	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	59	0	0	0	59	8	239	0	0	247	0	44	77	0	121	0	0	0	0	0	427
3:45 PM	49	0	0	0	49	1	221	0	0	222	0	27	53	0	80	0	0	0	0	0	351
Total	108	0	0	0	108	9	460	0	0	469	0	71	130	0	201	0	0	0	0	0	778
4:00 PM	52	0	0	0	52	3	218	0	0	221	0	47	68	0	115	0	0	0	0	0	388
4:15 PM	49	0	0	0	49	7	240	0	0	247	0	26	75	0	101	0	0	0	0	0	397
4:30 PM	55	0	0	0	55	1	252	0	0	253	0	22	73	0	95	0	0	0	0	0	403
4:45 PM	44	0	0	0	44	6	237	0	0	243	0	30	60	0	90	0	0	0	0	0	377
Total	200	0	0	0	200	17	947	0	0	964	0	125	276	0	401	0	0	0	0	0	1565
5:00 PM	36	0	0	0	36	4	257	0	0	261	0	24	88	0	112	0	0	0	0	0	409
5:15 PM	36	0	0	0	36	5	235	0	0	240	0	21	82	0	103	0	0	0	0	0	379
5:30 PM	27	0	0	0	27	1	267	0	0	268	0	19	80	0	99	0	0	0	0	0	394
5:45 PM	23	0	0	0	23	4	243	0	0	247	0	25	71	0	96	0	0	0	0	0	366
Total	122	0	0	0	122	14	1002	0	0	1016	0	89	321	0	410	0	0	0	0	0	1548
6:00 PM	28	0	0	0	28	6	269	0	0	275	0	11	74	0	85	0	0	0	0	0	388
6:15 PM	27	0	0	0	27	3	246	0	0	249	0	19	71	0	90	0	0	0	0	0	366
Total	55	0	0	0	55	9	515	0	0	524	0	30	145	0	175	0	0	0	0	0	754
Grand Total	485	0	0	0	485	49	2924	0	0	2973	0	315	872	0	1187	0	0	0	0	0	4645
Approach %	100.0	0.0	0.0	0.0		1.6	98.4	0.0	0.0		0.0	26.5	73.5	0.0		0.0	0.0	0.0	0.0		
Total %	10.4	0.0	0.0	0.0	10.4	1.1	62.9	0.0	0.0	64.0	0.0	6.8	18.8	0.0	25.6	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	364					0					0					4281					4645

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:15 PM	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:15 PM	49	0	0	0	49	7	240	0	0	247	0	26	75	0	101	0	0	0	0	0	397
4:30 PM	55	0	0	0	55	1	252	0	0	253	0	22	73	0	95	0	0	0	0	0	403
4:45 PM	44	0	0	0	44	6	237	0	0	243	0	30	60	0	90	0	0	0	0	0	377
5:00 PM	36	0	0	0	36	4	257	0	0	261	0	24	88	0	112	0	0	0	0	0	409
Total Volume	184	0	0	0	184	18	986	0	0	1004	0	102	296	0	398	0	0	0	0	0	1586
% Approach Total	100.0	0.0	0.0	0.0		1.8	98.2	0.0	0.0		0.0	25.6	74.4	0.0		0.0	0.0	0.0	0.0		
PHF	0.836	0.000	0.000	0.000	0.836	0.643	0.959	0.000	0.000	0.962	0.000	0.850	0.841	0.000	0.888	0.000	0.000	0.000	0.000	0.000	0.969
Entering Leg	184	0	0	0	184	18	986	0	0	1004	0	102	296	0	398	0	0	0	0	0	1586
Exiting Leg	120					0					0					1466					1586
Total	304					1004					398					1466					3172

PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	6
3:45 PM	0	0	0	0	0	0	3	0	0	3	0	0	3	0	3	0	0	0	0	0	6
Total	1	0	0	0	1	0	8	0	0	8	0	0	3	0	3	0	0	0	0	0	12
4:00 PM	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	0	0	0	0	0	6
4:15 PM	0	0	0	0	0	0	8	0	0	8	0	0	4	0	4	0	0	0	0	0	12
4:30 PM	1	0	0	0	1	0	2	0	0	2	0	0	2	0	2	0	0	0	0	0	5
4:45 PM	0	0	0	0	0	0	4	0	0	4	0	0	4	0	4	0	0	0	0	0	8
Total	1	0	0	0	1	0	19	0	0	19	0	0	11	0	11	0	0	0	0	0	31
5:00 PM	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	0	0	0	0	0	5
5:15 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	3
5:45 PM	1	0	0	0	1	0	5	0	0	5	0	0	3	0	3	0	0	0	0	0	9
Total	2	0	0	0	2	0	13	0	0	13	0	1	4	0	5	0	0	0	0	0	20
6:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
Total	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	0	0	0	0	0	4
Grand Total	4	0	0	0	4	0	43	0	0	43	0	1	19	0	20	0	0	0	0	0	67
Approach %	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	5.0	95.0	0.0		0.0	0.0	0.0	0.0		
Total %	6.0	0.0	0.0	0.0	6.0	0.0	64.2	0.0	0.0	64.2	0.0	1.5	28.4	0.0	29.9	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	1					0					0					66					67

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:00 PM	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	0	0	0	0	0	6
4:15 PM	0	0	0	0	0	0	8	0	0	8	0	0	4	0	4	0	0	0	0	0	12
4:30 PM	1	0	0	0	1	0	2	0	0	2	0	0	2	0	2	0	0	0	0	0	5
4:45 PM	0	0	0	0	0	0	4	0	0	4	0	0	4	0	4	0	0	0	0	0	8
Total Volume	1	0	0	0	1	0	19	0	0	19	0	0	11	0	11	0	0	0	0	0	31
% Approach Total	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.000	0.594	0.000	0.000	0.594	0.000	0.000	0.688	0.000	0.688	0.000	0.000	0.000	0.000	0.000	0.646
Entering Leg	1	0	0	0	1	0	19	0	0	19	0	0	11	0	11	0	0	0	0	0	31
Exiting Leg	0					0					0					31					31
Total	1					19					11					31					62

PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	5
3:45 PM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	6
Total	2	0	0	0	2	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	11
4:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	3
4:15 PM	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	8
4:30 PM	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	7
4:45 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Total	2	0	0	0	2	0	19	0	0	19	0	0	1	0	1	0	0	0	0	0	22
5:00 PM	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	4
5:15 PM	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	5
Total	5	0	0	0	5	0	11	0	0	11	0	0	0	0	0	0	0	0	0	0	16
6:00 PM	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	4
6:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	2	0	0	0	2	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	6
Grand Total	11	0	0	0	11	0	43	0	0	43	0	0	1	0	1	0	0	0	0	0	55
Approach %	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		
Total %	20.0	0.0	0.0	0.0	20.0	0.0	78.2	0.0	0.0	78.2	0.0	0.0	1.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0					0					0					55					55

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Everett Street					Beach Street (1A)					Rotary					Rotary					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	5
3:45 PM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	6
4:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	3
4:15 PM	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	8
Total Volume	3	0	0	0	3	0	18	0	0	18	0	0	1	0	1	0	0	0	0	0	22
% Approach Total	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.375	0.000	0.000	0.000	0.375	0.000	0.643	0.000	0.000	0.643	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.688
Entering Leg	3	0	0	0	3	0	18	0	0	18	0	0	1	0	1	0	0	0	0	0	22
Exiting Leg	0					0					0					22					22
Total	3					18					1					22					44



PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Bicycles (on Roadway and Crosswalks)

	Everett Street							Beach Street (1A)							Rotary							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	1	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	25.0	0.0	0.0	0.0	75.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	75.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0							3							0							1							4

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Everett Street							Beach Street (1A)							Rotary							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total Volume	0	0	0	0	0	0	0	0	1	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	75.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.333	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.333	
Entering Leg	0	0	0	0	0	0	0	0	1	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Exiting Leg	0							3							0							1							4
Total	0							7							0							1							8

PDI File #: **175607 (15)**  
 Location: **N: Everett Street S: Rotary**  
 Location: **E: Beach Street (1A) W: Rotary**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Pedestrians

	Everett Street							Beach Street (1A)							Rotary							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	8	4	12	0	0	0	0	0	0	0	15
Total	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	8	5	13	0	0	0	0	0	0	0	16
4:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	0	3	3	6	0	0	0	0	0	0	0	8
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3	9	0	0	0	0	0	0	0	9
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	7	0	0	0	0	0	0	0	7
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	4	6	0	0	0	0	0	0	0	7
Total	0	0	0	0	1	0	1	0	0	0	0	0	2	2	0	0	0	0	14	14	28	0	0	0	0	0	0	0	31
5:00 PM	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	10	0	10	0	0	0	0	1	0	1	13
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	4	2	6	0	0	0	0	0	0	0	9
5:30 PM	0	0	0	0	0	2	2	0	0	0	0	0	9	9	0	0	0	0	3	8	11	0	0	0	0	0	1	1	23
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	5	5	10	0	0	0	0	0	0	0	12
Total	0	0	0	0	1	2	3	0	0	0	0	4	11	15	0	0	0	0	22	15	37	0	0	0	0	1	1	2	57
6:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	3	3	0	0	0	0	5	4	9	0	0	0	0	0	0	0	12
6:15 PM	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	4	2	6	0	0	0	0	0	0	0	8
Total	0	0	0	0	1	0	1	0	0	0	0	4	0	4	0	0	0	0	9	6	15	0	0	0	0	0	0	0	20
Grand Total	0	0	0	0	3	2	5	0	0	0	0	10	14	24	0	0	0	0	53	40	93	0	0	0	0	1	1	2	124
Approach %	0.0	0.0	0.0	0.0	60.0	40.0		0.0	0.0	0.0	0.0	41.7	58.3		0.0	0.0	0.0	0.0	57.0	43.0		0.0	0.0	0.0	0.0	50.0	50.0		
Total %	0.0	0.0	0.0	0.0	2.4	1.6	4.0	0.0	0.0	0.0	0.0	8.1	11.3	19.4	0.0	0.0	0.0	0.0	42.7	32.3	75.0	0.0	0.0	0.0	0.0	0.8	0.8	1.6	
Exiting Leg Total	5							24							93							2							124

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

5:00 PM	Everett Street							Beach Street (1A)							Rotary							Rotary							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
5:00 PM	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	10	0	10	0	0	0	0	1	0	1	13
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	4	2	6	0	0	0	0	0	0	0	9
5:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	9	9	0	0	0	0	3	8	11	0	0	0	0	0	1	1	23
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	5	5	10	0	0	0	0	0	0	0	12
Total Volume	0	0	0	0	1	2	3	0	0	0	0	4	11	15	0	0	0	0	22	15	37	0	0	0	0	1	1	2	57
% Approach Total	0.0	0.0	0.0	0.0	33.3	66.7		0.0	0.0	0.0	0.0	26.7	73.3		0.0	0.0	0.0	0.0	59.5	40.5		0.0	0.0	0.0	0.0	50.0	50.0		
PHF	0.000	0.000	0.000	0.000	0.250	0.250	0.375	0.000	0.000	0.000	0.000	0.500	0.306	0.417	0.000	0.000	0.000	0.000	0.550	0.469	0.841	0.000	0.000	0.000	0.000	0.250	0.250	0.500	0.620
Entering Leg	0	0	0	0	1	2	3	0	0	0	0	4	11	15	0	0	0	0	22	15	37	0	0	0	0	1	1	2	57
Exiting Leg	3							15							37							2							57
Total	6							30							74							4							114

PDI File #: **175607 (16)**  
 Location: **N: Rotary S: Rotary**  
 Location: **W: Beach Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
6:30 AM	27	320	0	347	0	0	0	0	65	0	0	65	412
6:45 AM	28	293	0	321	0	0	0	0	48	0	0	48	369
Total	55	613	0	668	0	0	0	0	113	0	0	113	781
7:00 AM	53	301	0	354	0	0	0	0	77	0	0	77	431
7:15 AM	73	255	0	328	0	0	0	0	78	0	0	78	406
7:30 AM	78	266	0	344	0	0	0	0	91	0	0	91	435
7:45 AM	82	248	0	330	0	0	0	0	83	0	0	83	413
Total	286	1070	0	1356	0	0	0	0	329	0	0	329	1685
8:00 AM	69	241	0	310	0	0	0	0	113	0	0	113	423
8:15 AM	77	281	0	358	0	0	0	0	121	0	0	121	479
8:30 AM	54	274	0	328	0	0	0	0	116	0	0	116	444
8:45 AM	58	299	0	357	0	0	0	0	87	0	0	87	444
Total	258	1095	0	1353	0	0	0	0	437	0	0	437	1790
9:00 AM	42	266	0	308	0	0	0	0	60	0	0	60	368
9:15 AM	57	293	0	350	0	0	0	0	72	0	0	72	422
Total	99	559	0	658	0	0	0	0	132	0	0	132	790
Grand Total	698	3337	0	4035	0	0	0	0	1011	0	0	1011	5046
Approach %	17.3	82.7	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
Total %	13.8	66.1	0.0	80.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	20.0	
Exiting Leg Total	0				4348				698				5046
Cars	645	3162	0	3807	0	0	0	0	964	0	0	964	4771
% Cars	92.4	94.8	0.0	94.3	0.0	0.0	0.0	0.0	95.4	0.0	0.0	95.4	94.6
Exiting Leg Total	0				4126				645				4771
Heavy Vehicles	27	128	0	155	0	0	0	0	18	0	0	18	173
% Heavy Vehicles	3.9	3.8	0.0	3.8	0.0	0.0	0.0	0.0	1.8	0.0	0.0	1.8	3.4
Exiting Leg Total	0				146				27				173
Buses	26	47	0	73	0	0	0	0	29	0	0	29	102
% Buses	3.7	1.4	0.0	1.8	0.0	0.0	0.0	0.0	2.9	0.0	0.0	2.9	2.0
Exiting Leg Total	0				76				26				102

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:00 AM	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
8:00 AM	69	241	0	310	0	0	0	0	113	0	0	113	423
8:15 AM	77	281	0	358	0	0	0	0	121	0	0	121	479
8:30 AM	54	274	0	328	0	0	0	0	116	0	0	116	444
8:45 AM	58	299	0	357	0	0	0	0	87	0	0	87	444
Total Volume	258	1095	0	1353	0	0	0	0	437	0	0	437	1790
% Approach Total	19.1	80.9	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.838	0.916	0.000	0.945	0.000	0.000	0.000	0.000	0.903	0.000	0.000	0.903	0.934
Cars	245	1043	0	1288	0	0	0	0	424	0	0	424	1712
Cars %	95.0	95.3	0.0	95.2	0.0	0.0	0.0	0.0	97.0	0.0	0.0	97.0	95.6
Heavy Vehicles	6	38	0	44	0	0	0	0	7	0	0	7	51
Heavy Vehicles %	2.3	3.5	0.0	3.3	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.6	2.8
Buses	7	14	0	21	0	0	0	0	6	0	0	6	27
Buses %	2.7	1.3	0.0	1.6	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4	1.5
Cars Enter Leg	245	1043	0	1288	0	0	0	0	424	0	0	424	1712
Heavy Enter Leg	6	38	0	44	0	0	0	0	7	0	0	7	51
Bus Enter Leg	7	14	0	21	0	0	0	0	6	0	0	6	27
Total Entering Leg	258	1095	0	1353	0	0	0	0	437	0	0	437	1790
Cars Exiting Leg	0				1467				245				1712

PDI File #: **175607 (16)**  
 Location: **N: Rotary S: Rotary**  
 Location: **W: Beach Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
Heavy Exiting Leg	0				45				6				51
Buses Exiting Leg	0				20				7				27
Total Exiting Leg	0				1532				258				1790

PDI File #: **175607 (16)**  
 Location: **N: Rotary S: Rotary**  
 Location: **W: Beach Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars

	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
6:30 AM	25	300	0	325	0	0	0	0	63	0	0	63	388
6:45 AM	26	275	0	301	0	0	0	0	41	0	0	41	342
Total	51	575	0	626	0	0	0	0	104	0	0	104	730
7:00 AM	49	290	0	339	0	0	0	0	75	0	0	75	414
7:15 AM	67	240	0	307	0	0	0	0	74	0	0	74	381
7:30 AM	72	251	0	323	0	0	0	0	85	0	0	85	408
7:45 AM	73	236	0	309	0	0	0	0	78	0	0	78	387
Total	261	1017	0	1278	0	0	0	0	312	0	0	312	1590
8:00 AM	68	230	0	298	0	0	0	0	110	0	0	110	408
8:15 AM	73	272	0	345	0	0	0	0	117	0	0	117	462
8:30 AM	52	259	0	311	0	0	0	0	111	0	0	111	422
8:45 AM	52	282	0	334	0	0	0	0	86	0	0	86	420
Total	245	1043	0	1288	0	0	0	0	424	0	0	424	1712
9:00 AM	37	247	0	284	0	0	0	0	56	0	0	56	340
9:15 AM	51	280	0	331	0	0	0	0	68	0	0	68	399
Total	88	527	0	615	0	0	0	0	124	0	0	124	739
Grand Total	645	3162	0	3807	0	0	0	0	964	0	0	964	4771
Approach %	16.9	83.1	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
Total %	13.5	66.3	0.0	79.8	0.0	0.0	0.0	0.0	20.2	0.0	0.0	20.2	
Exiting Leg Total	0				4126				645				4771

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:00 AM	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
8:00 AM	68	230	0	298	0	0	0	0	110	0	0	110	408
8:15 AM	73	272	0	345	0	0	0	0	117	0	0	117	462
8:30 AM	52	259	0	311	0	0	0	0	111	0	0	111	422
8:45 AM	52	282	0	334	0	0	0	0	86	0	0	86	420
Total Volume	245	1043	0	1288	0	0	0	0	424	0	0	424	1712
% Approach Total	19.0	81.0	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.839	0.925	0.000	0.933	0.000	0.000	0.000	0.000	0.906	0.000	0.000	0.906	0.926
Entering Leg	245	1043	0	1288	0	0	0	0	424	0	0	424	1712
Exiting Leg				0				1467				245	1712
Total				1288				1467				669	3424

PDI File #: **175607 (16)**  
 Location: **N: Rotary S: Rotary**  
 Location: **W: Beach Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
6:30 AM	1	16	0	17	0	0	0	0	1	0	0	1	18
6:45 AM	0	15	0	15	0	0	0	0	3	0	0	3	18
Total	1	31	0	32	0	0	0	0	4	0	0	4	36
7:00 AM	2	7	0	9	0	0	0	0	1	0	0	1	10
7:15 AM	2	9	0	11	0	0	0	0	1	0	0	1	12
7:30 AM	4	9	0	13	0	0	0	0	2	0	0	2	15
7:45 AM	7	8	0	15	0	0	0	0	3	0	0	3	18
Total	15	33	0	48	0	0	0	0	7	0	0	7	55
8:00 AM	0	8	0	8	0	0	0	0	2	0	0	2	10
8:15 AM	3	7	0	10	0	0	0	0	3	0	0	3	13
8:30 AM	0	10	0	10	0	0	0	0	2	0	0	2	12
8:45 AM	3	13	0	16	0	0	0	0	0	0	0	0	16
Total	6	38	0	44	0	0	0	0	7	0	0	7	51
9:00 AM	2	14	0	16	0	0	0	0	0	0	0	0	16
9:15 AM	3	12	0	15	0	0	0	0	0	0	0	0	15
Total	5	26	0	31	0	0	0	0	0	0	0	0	31
Grand Total	27	128	0	155	0	0	0	0	18	0	0	18	173
Approach %	17.4	82.6	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
Total %	15.6	74.0	0.0	89.6	0.0	0.0	0.0	0.0	10.4	0.0	0.0	10.4	
Exiting Leg Total	0				146				27				173

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
8:30 AM	0	10	0	10	0	0	0	0	2	0	0	2	12
8:45 AM	3	13	0	16	0	0	0	0	0	0	0	0	16
9:00 AM	2	14	0	16	0	0	0	0	0	0	0	0	16
9:15 AM	3	12	0	15	0	0	0	0	0	0	0	0	15
Total Volume	8	49	0	57	0	0	0	0	2	0	0	2	59
% Approach Total	14.0	86.0	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.667	0.875	0.000	0.891	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.922
Entering Leg	8	49	0	57	0	0	0	0	2	0	0	2	59
Exiting Leg				0				51				8	59
Total				57				51				10	118

PDI File #: **175607 (16)**  
 Location: **N: Rotary S: Rotary**  
 Location: **W: Beach Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Buses

	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
6:30 AM	1	4	0	5	0	0	0	0	1	0	0	1	6
6:45 AM	2	3	0	5	0	0	0	0	4	0	0	4	9
Total	3	7	0	10	0	0	0	0	5	0	0	5	15
7:00 AM	2	4	0	6	0	0	0	0	1	0	0	1	7
7:15 AM	4	6	0	10	0	0	0	0	3	0	0	3	13
7:30 AM	2	6	0	8	0	0	0	0	4	0	0	4	12
7:45 AM	2	4	0	6	0	0	0	0	2	0	0	2	8
Total	10	20	0	30	0	0	0	0	10	0	0	10	40
8:00 AM	1	3	0	4	0	0	0	0	1	0	0	1	5
8:15 AM	1	2	0	3	0	0	0	0	1	0	0	1	4
8:30 AM	2	5	0	7	0	0	0	0	3	0	0	3	10
8:45 AM	3	4	0	7	0	0	0	0	1	0	0	1	8
Total	7	14	0	21	0	0	0	0	6	0	0	6	27
9:00 AM	3	5	0	8	0	0	0	0	4	0	0	4	12
9:15 AM	3	1	0	4	0	0	0	0	4	0	0	4	8
Total	6	6	0	12	0	0	0	0	8	0	0	8	20
Grand Total	26	47	0	73	0	0	0	0	29	0	0	29	102
Approach %	35.6	64.4	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
Total %	25.5	46.1	0.0	71.6	0.0	0.0	0.0	0.0	28.4	0.0	0.0	28.4	
Exiting Leg Total	0				76				26				102

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:45 AM	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
6:45 AM	2	3	0	5	0	0	0	0	4	0	0	4	9
7:00 AM	2	4	0	6	0	0	0	0	1	0	0	1	7
7:15 AM	4	6	0	10	0	0	0	0	3	0	0	3	13
7:30 AM	2	6	0	8	0	0	0	0	4	0	0	4	12
Total Volume	10	19	0	29	0	0	0	0	12	0	0	12	41
% Approach Total	34.5	65.5	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.625	0.792	0.000	0.725	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.750	0.788
Entering Leg	10	19	0	29	0	0	0	0	12	0	0	12	41
Exiting Leg				0				31				10	41
Total				29				31				22	82

PDI File #: **175607 (16)**  
 Location: **N: Rotary S: Rotary**  
 Location: **W: Beach Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Bicycles (on Roadway and Crosswalks)

	Rotary						Rotary						Beach Street						Total
	North						South						West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2
Grand Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	50.0	50.0	
Exiting Leg Total	0						1						1						2

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:15 AM	Rotary						Rotary						Beach Street						Total		
	North						South						West								
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total			
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2	
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0				
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.250		0.250	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2	
Exiting Leg	0												1							1	2
Total	0												2							2	4



PDI File #: **175607 (16)**  
 Location: **N: Rotary S: Rotary**  
 Location: **W: Beach Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Pedestrians

	Rotary						Rotary						Beach Street						Total
	North						South						West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	2	1	3	0	0	0	3	1	4	0	0	0	1	0	1	8
6:45 AM	0	0	0	3	3	6	0	0	0	5	5	10	0	0	0	2	2	4	20
Total	0	0	0	5	4	9	0	0	0	8	6	14	0	0	0	3	2	5	28
7:00 AM	0	0	0	5	2	7	0	0	0	4	3	7	0	0	0	0	1	1	15
7:15 AM	0	0	0	2	1	3	0	0	0	0	1	1	0	0	0	0	0	0	4
7:30 AM	0	0	0	2	1	3	0	0	0	2	4	6	0	0	0	0	2	2	11
7:45 AM	0	0	0	1	0	1	0	0	0	4	3	7	0	0	0	3	2	5	13
Total	0	0	0	10	4	14	0	0	0	10	11	21	0	0	0	3	5	8	43
8:00 AM	0	0	0	2	3	5	0	0	0	0	9	9	0	0	0	1	9	10	24
8:15 AM	0	0	0	0	2	2	0	0	0	0	4	4	0	0	0	0	2	2	8
8:30 AM	0	0	0	1	0	1	0	0	0	3	2	5	0	0	0	2	1	3	9
8:45 AM	0	0	0	0	5	5	0	0	0	2	6	8	0	0	0	2	1	3	16
Total	0	0	0	3	10	13	0	0	0	5	21	26	0	0	0	5	13	18	57
9:00 AM	0	0	0	0	3	3	0	0	0	0	4	4	0	0	0	0	1	1	8
9:15 AM	0	0	0	1	0	1	0	0	0	3	5	8	0	0	0	0	5	5	14
Total	0	0	0	1	3	4	0	0	0	3	9	12	0	0	0	0	6	6	22
Grand Total	0	0	0	19	21	40	0	0	0	26	47	73	0	0	0	11	26	37	150
Approach %	0.0	0.0	0.0	47.5	52.5		0.0	0.0	0.0	35.6	64.4		0.0	0.0	0.0	29.7	70.3		
Total %	0.0	0.0	0.0	12.7	14.0	26.7	0.0	0.0	0.0	17.3	31.3	48.7	0.0	0.0	0.0	7.3	17.3	24.7	
Exiting Leg Total	40						73						37						150

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:00 AM	Rotary						Rotary						Beach Street						Total
	North						South						West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	
8:00 AM	0	0	0	2	3	5	0	0	0	0	9	9	0	0	0	1	9	10	24
8:15 AM	0	0	0	0	2	2	0	0	0	0	4	4	0	0	0	0	2	2	8
8:30 AM	0	0	0	1	0	1	0	0	0	3	2	5	0	0	0	2	1	3	9
8:45 AM	0	0	0	0	5	5	0	0	0	2	6	8	0	0	0	2	1	3	16
Total Volume	0	0	0	3	10	13	0	0	0	5	21	26	0	0	0	5	13	18	57
% Approach Total	0.0	0.0	0.0	23.1	76.9		0.0	0.0	0.0	19.2	80.8		0.0	0.0	0.0	27.8	72.2		
PHF	0.000	0.000	0.000	0.375	0.500	0.650	0.000	0.000	0.000	0.417	0.583	0.722	0.000	0.000	0.000	0.625	0.361	0.450	0.594
Entering Leg	0	0	0	3	10	13	0	0	0	5	21	26	0	0	0	5	13	18	57
Exiting Leg	13						26						18						57
Total	26						52						36						114

PDI File #: **175607 (16)**  
 Location: **N: Rotary S: Rotary**  
 Location: **W: Beach Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
3:30 PM	104	288	0	392	0	0	0	0	92	0	0	92	484
3:45 PM	97	258	0	355	0	0	0	0	81	0	0	81	436
Total	201	546	0	747	0	0	0	0	173	0	0	173	920
4:00 PM	100	280	0	380	0	0	0	0	109	0	0	109	489
4:15 PM	107	283	0	390	0	0	0	0	93	0	0	93	483
4:30 PM	101	278	0	379	0	0	0	0	82	0	0	82	461
4:45 PM	99	258	0	357	0	0	0	0	103	0	0	103	460
Total	407	1099	0	1506	0	0	0	0	387	0	0	387	1893
5:00 PM	108	251	0	359	0	0	0	0	92	0	0	92	451
5:15 PM	105	249	0	354	0	0	0	0	83	0	0	83	437
5:30 PM	126	245	0	371	0	0	0	0	84	0	0	84	455
5:45 PM	114	248	0	362	0	0	0	0	91	0	0	91	453
Total	453	993	0	1446	0	0	0	0	350	0	0	350	1796
6:00 PM	123	261	0	384	0	0	0	0	89	0	0	89	473
6:15 PM	85	251	0	336	0	0	0	0	91	0	0	91	427
Total	208	512	0	720	0	0	0	0	180	0	0	180	900
Grand Total	1269	3150	0	4419	0	0	0	0	1090	0	0	1090	5509
Approach %	28.7	71.3	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
Total %	23.0	57.2	0.0	80.2	0.0	0.0	0.0	0.0	19.8	0.0	0.0	19.8	
Exiting Leg Total	0				4240				1269				5509
Cars	1230	3070	0	4300	0	0	0	0	1040	0	0	1040	5340
% Cars	96.9	97.5	0.0	97.3	0.0	0.0	0.0	0.0	95.4	0.0	0.0	95.4	96.9
Exiting Leg Total	0				4110				1230				5340
Heavy Vehicles	12	47	0	59	0	0	0	0	18	0	0	18	77
% Heavy Vehicles	0.9	1.5	0.0	1.3	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.7	1.4
Exiting Leg Total	0				65				12				77
Buses	27	33	0	60	0	0	0	0	32	0	0	32	92
% Buses	2.1	1.0	0.0	1.4	0.0	0.0	0.0	0.0	2.9	0.0	0.0	2.9	1.7
Exiting Leg Total	0				65				27				92

### Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:00 PM	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
4:00 PM	100	280	0	380	0	0	0	0	109	0	0	109	489
4:15 PM	107	283	0	390	0	0	0	0	93	0	0	93	483
4:30 PM	101	278	0	379	0	0	0	0	82	0	0	82	461
4:45 PM	99	258	0	357	0	0	0	0	103	0	0	103	460
Total Volume	407	1099	0	1506	0	0	0	0	387	0	0	387	1893
% Approach Total	27.0	73.0	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.951	0.971	0.000	0.965	0.000	0.000	0.000	0.000	0.888	0.000	0.000	0.888	0.968
Cars	387	1068	0	1455	0	0	0	0	363	0	0	363	1818
Cars %	95.1	97.2	0.0	96.6	0.0	0.0	0.0	0.0	93.8	0.0	0.0	93.8	96.0
Heavy Vehicles	7	18	0	25	0	0	0	0	6	0	0	6	31
Heavy Vehicles %	1.7	1.6	0.0	1.7	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.6	1.6
Buses	13	13	0	26	0	0	0	0	18	0	0	18	44
Buses %	3.2	1.2	0.0	1.7	0.0	0.0	0.0	0.0	4.7	0.0	0.0	4.7	2.3
Cars Enter Leg	387	1068	0	1455	0	0	0	0	363	0	0	363	1818
Heavy Enter Leg	7	18	0	25	0	0	0	0	6	0	0	6	31
Bus Enter Leg	13	13	0	26	0	0	0	0	18	0	0	18	44
Total Entering Leg	407	1099	0	1506	0	0	0	0	387	0	0	387	1893

PDI File #: **175607 (16)**  
 Location: **N: Rotary S: Rotary**  
 Location: **W: Beach Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
Cars Exiting Leg	0				1431				387				1818
Heavy Exiting Leg	0				24				7				31
Buses Exiting Leg	0				31				13				44
Total Exiting Leg	0				1486				407				1893

PDI File #: **175607 (16)**  
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 Location: **W: Beach Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars

	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
3:30 PM	101	280	0	381	0	0	0	0	89	0	0	89	470
3:45 PM	95	248	0	343	0	0	0	0	79	0	0	79	422
Total	196	528	0	724	0	0	0	0	168	0	0	168	892
4:00 PM	97	272	0	369	0	0	0	0	100	0	0	100	469
4:15 PM	99	270	0	369	0	0	0	0	88	0	0	88	457
4:30 PM	97	273	0	370	0	0	0	0	78	0	0	78	448
4:45 PM	94	253	0	347	0	0	0	0	97	0	0	97	444
Total	387	1068	0	1455	0	0	0	0	363	0	0	363	1818
5:00 PM	107	245	0	352	0	0	0	0	89	0	0	89	441
5:15 PM	104	239	0	343	0	0	0	0	81	0	0	81	424
5:30 PM	124	241	0	365	0	0	0	0	80	0	0	80	445
5:45 PM	109	242	0	351	0	0	0	0	87	0	0	87	438
Total	444	967	0	1411	0	0	0	0	337	0	0	337	1748
6:00 PM	120	259	0	379	0	0	0	0	84	0	0	84	463
6:15 PM	83	248	0	331	0	0	0	0	88	0	0	88	419
Total	203	507	0	710	0	0	0	0	172	0	0	172	882
Grand Total	1230	3070	0	4300	0	0	0	0	1040	0	0	1040	5340
Approach %	28.6	71.4	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
Total %	23.0	57.5	0.0	80.5	0.0	0.0	0.0	0.0	19.5	0.0	0.0	19.5	
Exiting Leg Total	0				4110				1230				5340

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
3:30 PM	101	280	0	381	0	0	0	0	89	0	0	89	470
3:45 PM	95	248	0	343	0	0	0	0	79	0	0	79	422
4:00 PM	97	272	0	369	0	0	0	0	100	0	0	100	469
4:15 PM	99	270	0	369	0	0	0	0	88	0	0	88	457
Total Volume	392	1070	0	1462	0	0	0	0	356	0	0	356	1818
% Approach Total	26.8	73.2	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.970	0.955	0.000	0.959	0.000	0.000	0.000	0.000	0.890	0.000	0.000	0.890	0.967
Entering Leg	392	1070	0	1462	0	0	0	0	356	0	0	356	1818
Exiting Leg	0				1426				392				1818
Total	1462				1426				748				3636

PDI File #: **175607 (16)**  
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 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
3:30 PM	1	5	0	6	0	0	0	0	2	0	0	2	8
3:45 PM	0	7	0	7	0	0	0	0	1	0	0	1	8
Total	1	12	0	13	0	0	0	0	3	0	0	3	16
4:00 PM	2	4	0	6	0	0	0	0	1	0	0	1	7
4:15 PM	3	8	0	11	0	0	0	0	2	0	0	2	13
4:30 PM	1	2	0	3	0	0	0	0	1	0	0	1	4
4:45 PM	1	4	0	5	0	0	0	0	2	0	0	2	7
Total	7	18	0	25	0	0	0	0	6	0	0	6	31
5:00 PM	0	4	0	4	0	0	0	0	3	0	0	3	7
5:15 PM	0	4	0	4	0	0	0	0	0	0	0	0	4
5:30 PM	0	3	0	3	0	0	0	0	1	0	0	1	4
5:45 PM	3	4	0	7	0	0	0	0	3	0	0	3	10
Total	3	15	0	18	0	0	0	0	7	0	0	7	25
6:00 PM	0	1	0	1	0	0	0	0	1	0	0	1	2
6:15 PM	1	1	0	2	0	0	0	0	1	0	0	1	3
Total	1	2	0	3	0	0	0	0	2	0	0	2	5
Grand Total	12	47	0	59	0	0	0	0	18	0	0	18	77
Approach %	20.3	79.7	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
Total %	15.6	61.0	0.0	76.6	0.0	0.0	0.0	0.0	23.4	0.0	0.0	23.4	
Exiting Leg Total	0				65				12				77

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
3:30 PM	1	5	0	6	0	0	0	0	2	0	0	2	8
3:45 PM	0	7	0	7	0	0	0	0	1	0	0	1	8
4:00 PM	2	4	0	6	0	0	0	0	1	0	0	1	7
4:15 PM	3	8	0	11	0	0	0	0	2	0	0	2	13
Total Volume	6	24	0	30	0	0	0	0	6	0	0	6	36
% Approach Total	20.0	80.0	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.500	0.750	0.000	0.682	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.750	0.692
Entering Leg	6	24	0	30	0	0	0	0	6	0	0	6	36
Exiting Leg				0				30				6	36
Total				30				30				12	72

PDI File #: **175607 (16)**  
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 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	Rotary				Rotary				Beach Street				Total
	North				South				West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
3:30 PM	2	3	0	5	0	0	0	0	1	0	0	1	6
3:45 PM	2	3	0	5	0	0	0	0	1	0	0	1	6
Total	4	6	0	10	0	0	0	0	2	0	0	2	12
4:00 PM	1	4	0	5	0	0	0	0	8	0	0	8	13
4:15 PM	5	5	0	10	0	0	0	0	3	0	0	3	13
4:30 PM	3	3	0	6	0	0	0	0	3	0	0	3	9
4:45 PM	4	1	0	5	0	0	0	0	4	0	0	4	9
Total	13	13	0	26	0	0	0	0	18	0	0	18	44
5:00 PM	1	2	0	3	0	0	0	0	0	0	0	0	3
5:15 PM	1	6	0	7	0	0	0	0	2	0	0	2	9
5:30 PM	2	1	0	3	0	0	0	0	3	0	0	3	6
5:45 PM	2	2	0	4	0	0	0	0	1	0	0	1	5
Total	6	11	0	17	0	0	0	0	6	0	0	6	23
6:00 PM	3	1	0	4	0	0	0	0	4	0	0	4	8
6:15 PM	1	2	0	3	0	0	0	0	2	0	0	2	5
Total	4	3	0	7	0	0	0	0	6	0	0	6	13
Grand Total	27	33	0	60	0	0	0	0	32	0	0	32	92
Approach %	45.0	55.0	0.0		0.0	0.0	0.0		100.0	0.0	0.0		
Total %	29.3	35.9	0.0	65.2	0.0	0.0	0.0	0.0	34.8	0.0	0.0	34.8	
Exiting Leg Total	0				65				27				92

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:00 PM	Rotary					Rotary					Beach Street					Total
	North					South					West					
	Right	Thru	U-Turn	Total		Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total			
4:00 PM	1	4	0	5		0	0	0	0	8	0	0	8	13		
4:15 PM	5	5	0	10		0	0	0	0	3	0	0	3	13		
4:30 PM	3	3	0	6		0	0	0	0	3	0	0	3	9		
4:45 PM	4	1	0	5		0	0	0	0	4	0	0	4	9		
Total Volume	13	13	0	26		0	0	0	0	18	0	0	18	44		
% Approach Total	50.0	50.0	0.0			0.0	0.0	0.0		100.0	0.0	0.0				
PHF	0.650	0.650	0.000	0.650		0.000	0.000	0.000	0.000	0.563	0.000	0.000	0.563	0.846		
Entering Leg	13	13	0	26		0	0	0	0	18	0	0	18	44		
Exiting Leg	0					31					13					44
Total	26					31					31					88

PDI File #: **175607 (16)**  
 Location: **N: Rotary S: Rotary**  
 Location: **W: Beach Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Bicycles (on Roadway and Crosswalks)

	Rotary						Rotary						Beach Street						Total
	North						South						West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	2
6:00 PM	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	3	3	0	0	0	0	3	3	0	0	0	0	0	0	6
Total	1	0	0	0	4	5	0	0	0	0	3	3	0	0	0	0	0	0	8
Grand Total	1	0	0	1	4	6	0	0	0	1	3	4	0	0	0	0	0	0	10
Approach %	16.7	0.0	0.0	16.7	66.7		0.0	0.0	0.0	25.0	75.0		0.0	0.0	0.0	0.0	0.0		
Total %	10.0	0.0	0.0	10.0	40.0	60.0	0.0	0.0	0.0	10.0	30.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	5						4						1						10

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

5:30 PM	Rotary						Rotary						Beach Street						Total
	North						South						West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	
5:30 PM	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	3	3	0	0	0	0	3	3	0	0	0	0	0	0	6
Total Volume	1	0	0	1	4	6	0	0	0	1	3	4	0	0	0	0	0	0	10
% Approach Total	16.7	0.0	0.0	16.7	66.7		0.0	0.0	0.0	25.0	75.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.250	0.333	0.500	0.000	0.000	0.000	0.250	0.250	0.333	0.000	0.000	0.000	0.000	0.000	0.000	0.417
Entering Leg	1	0	0	1	4	6	0	0	0	1	3	4	0	0	0	0	0	0	10
Exiting Leg	5						4						1						10
Total	11						8						1						20

PDI File #: **175607 (16)**  
 Location: **N: Rotary S: Rotary**  
 Location: **W: Beach Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Pedestrians

	Rotary						Rotary						Beach Street						Total
	North						South						West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	1	4	5	0	0	0	1	10	11	0	0	0	1	4	5	21
3:45 PM	0	0	0	5	8	13	0	0	0	10	8	18	0	0	0	10	4	14	45
Total	0	0	0	6	12	18	0	0	0	11	18	29	0	0	0	11	8	19	66
4:00 PM	0	0	0	5	9	14	0	0	0	8	6	14	0	0	0	4	2	6	34
4:15 PM	0	0	0	2	0	2	0	0	0	5	2	7	0	0	0	4	2	6	15
4:30 PM	0	0	0	1	5	6	0	0	0	3	5	8	0	0	0	2	2	4	18
4:45 PM	0	0	0	2	4	6	0	0	0	3	3	6	0	0	0	1	1	2	14
Total	0	0	0	10	18	28	0	0	0	19	16	35	0	0	0	11	7	18	81
5:00 PM	0	0	0	7	0	7	0	0	0	11	1	12	0	0	0	5	0	5	24
5:15 PM	0	0	0	4	2	6	0	0	0	2	3	5	0	0	0	2	1	3	14
5:30 PM	0	0	0	2	2	4	0	0	0	2	6	8	0	0	0	0	7	7	19
5:45 PM	0	0	0	2	3	5	0	0	0	1	4	5	0	0	0	0	5	5	15
Total	0	0	0	15	7	22	0	0	0	16	14	30	0	0	0	7	13	20	72
6:00 PM	0	0	0	6	3	9	0	0	0	8	3	11	0	0	0	0	0	0	20
6:15 PM	0	0	0	2	3	5	0	0	0	6	4	10	0	0	0	3	2	5	20
Total	0	0	0	8	6	14	0	0	0	14	7	21	0	0	0	3	2	5	40
Grand Total	0	0	0	39	43	82	0	0	0	60	55	115	0	0	0	32	30	62	259
Approach %	0.0	0.0	0.0	47.6	52.4		0.0	0.0	0.0	52.2	47.8		0.0	0.0	0.0	51.6	48.4		
Total %	0.0	0.0	0.0	15.1	16.6	31.7	0.0	0.0	0.0	23.2	21.2	44.4	0.0	0.0	0.0	12.4	11.6	23.9	
Exiting Leg Total	82						115						62						259

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Rotary						Rotary						Beach Street						Total
	North						South						West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	1	4	5	0	0	0	1	10	11	0	0	0	1	4	5	21
3:45 PM	0	0	0	5	8	13	0	0	0	10	8	18	0	0	0	10	4	14	45
4:00 PM	0	0	0	5	9	14	0	0	0	8	6	14	0	0	0	4	2	6	34
4:15 PM	0	0	0	2	0	2	0	0	0	5	2	7	0	0	0	4	2	6	15
Total Volume	0	0	0	13	21	34	0	0	0	24	26	50	0	0	0	19	12	31	115
% Approach Total	0.0	0.0	0.0	38.2	61.8		0.0	0.0	0.0	48.0	52.0		0.0	0.0	0.0	61.3	38.7		
PHF	0.000	0.000	0.000	0.650	0.583	0.607	0.000	0.000	0.000	0.600	0.650	0.694	0.000	0.000	0.000	0.475	0.750	0.554	0.639
Entering Leg	0	0	0	13	21	34	0	0	0	24	26	50	0	0	0	19	12	31	115
Exiting Leg	34						50						31						115
Total	68						100						62						230



PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	1	270	70	0	341	0	33	22	0	55	11	163	5	3	182	14	17	1	0	32	610
6:45 AM	2	261	70	2	335	2	36	19	0	57	9	142	13	5	169	5	33	1	0	39	600
Total	3	531	140	2	676	2	69	41	0	112	20	305	18	8	351	19	50	2	0	71	1210
7:00 AM	5	231	75	2	313	0	42	14	0	56	9	150	12	14	185	6	32	0	0	38	592
7:15 AM	3	260	86	2	351	1	34	22	0	57	11	196	14	12	233	15	33	2	0	50	691
7:30 AM	1	256	83	4	344	0	35	27	0	62	15	174	16	26	231	17	40	1	0	58	695
7:45 AM	1	271	97	8	377	2	27	24	0	53	17	165	18	9	209	13	43	4	0	60	699
Total	10	1018	341	16	1385	3	138	87	0	228	52	685	60	61	858	51	148	7	0	206	2677
8:00 AM	2	250	78	4	334	5	33	16	0	54	10	157	22	1	190	12	45	3	0	60	638
8:15 AM	1	270	85	8	364	1	39	14	0	54	10	206	14	0	230	14	43	8	0	65	713
8:30 AM	2	258	76	1	337	3	33	7	0	43	16	188	12	3	219	11	42	3	0	56	655
8:45 AM	12	244	101	3	360	5	39	10	0	54	13	155	18	1	187	5	21	5	0	31	632
Total	17	1022	340	16	1395	14	144	47	0	205	49	706	66	5	826	42	151	19	0	212	2638
9:00 AM	1	197	70	7	275	1	32	22	0	55	6	170	17	4	197	11	32	4	0	47	574
9:15 AM	4	232	78	4	318	2	23	9	0	34	14	187	12	4	217	8	37	3	0	48	617
Total	5	429	148	11	593	3	55	31	0	89	20	357	29	8	414	19	69	7	0	95	1191
Grand Total	35	3000	969	45	4049	22	406	206	0	634	141	2053	173	82	2449	131	418	35	0	584	7716
Approach %	0.9	74.1	23.9	1.1		3.5	64.0	32.5	0.0		5.8	83.8	7.1	3.3		22.4	71.6	6.0	0.0		
Total %	0.5	38.9	12.6	0.6	52.5	0.3	5.3	2.7	0.0	8.2	1.8	26.6	2.2	1.1	31.7	1.7	5.4	0.5	0.0	7.6	
Exiting Leg Total	2155					1528					3419					614					7716
Cars	34	2735	922	45	3736	19	371	197	0	587	128	1824	167	78	2197	126	400	34	0	560	7080
% Cars	97.1	91.2	95.1	100.0	92.3	86.4	91.4	95.6	0.0	92.6	90.8	88.8	96.5	95.1	89.7	96.2	95.7	97.1	0.0	95.9	91.8
Exiting Leg Total	1922					1450					3136					572					7080
Heavy Vehicles	1	227	40	0	268	2	12	4	0	18	12	185	5	4	206	3	5	1	0	9	501
% Heavy Vehicles	2.9	7.6	4.1	0.0	6.6	9.1	3.0	1.9	0.0	2.8	8.5	9.0	2.9	4.9	8.4	2.3	1.2	2.9	0.0	1.5	6.5
Exiting Leg Total	188					57					238					18					501
Buses	0	38	7	0	45	1	23	5	0	29	1	44	1	0	46	2	13	0	0	15	135
% Buses	0.0	1.3	0.7	0.0	1.1	4.5	5.7	2.4	0.0	4.6	0.7	2.1	0.6	0.0	1.9	1.5	3.1	0.0	0.0	2.6	1.7
Exiting Leg Total	45					21					45					24					135

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:30 AM	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:30 AM	1	256	83	4	344	0	35	27	0	62	15	174	16	26	231	17	40	1	0	58	695
7:45 AM	1	271	97	8	377	2	27	24	0	53	17	165	18	9	209	13	43	4	0	60	699
8:00 AM	2	250	78	4	334	5	33	16	0	54	10	157	22	1	190	12	45	3	0	60	638
8:15 AM	1	270	85	8	364	1	39	14	0	54	10	206	14	0	230	14	43	8	0	65	713
Total Volume	5	1047	343	24	1419	8	134	81	0	223	52	702	70	36	860	56	171	16	0	243	2745
% Approach Total	0.4	73.8	24.2	1.7		3.6	60.1	36.3	0.0		6.0	81.6	8.1	4.2		23.0	70.4	6.6	0.0		
PHF	0.625	0.966	0.884	0.750	0.941	0.400	0.859	0.750	0.000	0.899	0.765	0.852	0.795	0.346	0.931	0.824	0.950	0.500	0.000	0.935	0.962
Cars	4	967	331	24	1326	8	125	79	0	212	47	634	67	35	783	53	167	16	0	236	2557
Cars %	80.0	92.4	96.5	100.0	93.4	100.0	93.3	97.5	0.0	95.1	90.4	90.3	95.7	97.2	91.0	94.6	97.7	100.0	0.0	97.1	93.2
Heavy Vehicles	1	67	10	0	78	0	2	1	0	3	5	49	2	1	57	2	1	0	0	3	141
Heavy Vehicles %	20.0	6.4	2.9	0.0	5.5	0.0	1.5	1.2	0.0	1.3	9.6	7.0	2.9	2.8	6.6	3.6	0.6	0.0	0.0	1.2	5.1
Buses	0	13	2	0	15	0	7	1	0	8	0	19	1	0	20	1	3	0	0	4	47
Buses %	0.0	1.2	0.6	0.0	1.1	0.0	5.2	1.2	0.0	3.6	0.0	2.7	1.4	0.0	2.3	1.8	1.8	0.0	0.0	1.6	1.7
Cars Enter Leg	4	967	331	24	1326	8	125	79	0	212	47	634	67	35	783	53	167	16	0	236	2557
Heavy Enter Leg	1	67	10	0	78	0	2	1	0	3	5	49	2	1	57	2	1	0	0	3	141
Bus Enter Leg	0	13	2	0	15	0	7	1	0	8	0	19	1	0	20	1	3	0	0	4	47
Total Entering Leg	5	1047	343	24	1419	8	134	81	0	223	52	702	70	36	860	56	171	16	0	243	2745
Cars Exiting Leg	682					545					1134					196					2557

PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



**Cars, Heavy Vehicles, and Buses (Combined)**

	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
Heavy Exiting Leg	49					16					71					5					141
Buses Exiting Leg	19					5					15					8					47
Total Exiting Leg	750					566					1220					209					2745

PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars

	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	1	251	67	0	319	0	31	21	0	52	9	149	5	3	166	14	17	1	0	32	569
6:45 AM	2	234	66	2	304	1	31	18	0	50	8	118	12	5	143	5	31	0	0	36	533
Total	3	485	133	2	623	1	62	39	0	102	17	267	17	8	309	19	48	1	0	68	1102
7:00 AM	5	212	73	2	292	0	34	14	0	48	9	140	12	12	173	6	29	0	0	35	548
7:15 AM	3	243	81	2	329	1	32	18	0	51	10	167	14	12	203	13	31	2	0	46	629
7:30 AM	1	242	80	4	327	0	34	26	0	60	14	157	16	26	213	14	38	1	0	53	653
7:45 AM	1	252	94	8	355	2	25	24	0	51	15	153	17	8	193	13	42	4	0	59	658
Total	10	949	328	16	1303	3	125	82	0	210	48	617	59	58	782	46	140	7	0	193	2488
8:00 AM	1	226	74	4	305	5	32	15	0	52	10	140	21	1	172	12	44	3	0	59	588
8:15 AM	1	247	83	8	339	1	34	14	0	49	8	184	13	0	205	14	43	8	0	65	658
8:30 AM	2	237	70	1	310	3	31	7	0	41	15	168	12	3	198	11	40	3	0	54	603
8:45 AM	12	210	90	3	315	3	37	10	0	50	12	140	17	1	170	5	20	5	0	30	565
Total	16	920	317	16	1269	12	134	46	0	192	45	632	63	5	745	42	147	19	0	208	2414
9:00 AM	1	173	68	7	249	1	30	21	0	52	6	148	16	3	173	11	30	4	0	45	519
9:15 AM	4	208	76	4	292	2	20	9	0	31	12	160	12	4	188	8	35	3	0	46	557
Total	5	381	144	11	541	3	50	30	0	83	18	308	28	7	361	19	65	7	0	91	1076
Grand Total	34	2735	922	45	3736	19	371	197	0	587	128	1824	167	78	2197	126	400	34	0	560	7080
Approach %	0.9	73.2	24.7	1.2		3.2	63.2	33.6	0.0		5.8	83.0	7.6	3.6		22.5	71.4	6.1	0.0		
Total %	0.5	38.6	13.0	0.6	52.8	0.3	5.2	2.8	0.0	8.3	1.8	25.8	2.4	1.1	31.0	1.8	5.6	0.5	0.0	7.9	
Exiting Leg Total	1922					1450					3136					572					7080

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:30 AM	American Legion Highway (Route 60)						Revere Street						American Legion Highway (Route 60)						Revere Street						
	North						East						South						West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total					
7:30 AM	1	242	80	4	327	0	34	26	0	60	14	157	16	26	213	14	38	1	0	53	653				
7:45 AM	1	252	94	8	355	2	25	24	0	51	15	153	17	8	193	13	42	4	0	59	658				
8:00 AM	1	226	74	4	305	5	32	15	0	52	10	140	21	1	172	12	44	3	0	59	588				
8:15 AM	1	247	83	8	339	1	34	14	0	49	8	184	13	0	205	14	43	8	0	65	658				
Total Volume	4	967	331	24	1326	8	125	79	0	212	47	634	67	35	783	53	167	16	0	236	2557				
% Approach Total	0.3	72.9	25.0	1.8		3.8	59.0	37.3	0.0		6.0	81.0	8.6	4.5		22.5	70.8	6.8	0.0						
PHF	1.000	0.959	0.880	0.750	0.934	0.400	0.919	0.760	0.000	0.883	0.783	0.861	0.798	0.337	0.919	0.946	0.949	0.500	0.000	0.908	0.972				
Entering Leg	4	967	331	24	1326	8	125	79	0	212	47	634	67	35	783	53	167	16	0	236	2557				
Exiting Leg	682						545						1134						196						2557
Total	2008						757						1917						432						5114

PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	18	2	0	20	0	1	1	0	2	1	11	0	0	12	0	0	0	0	0	34
6:45 AM	0	24	4	0	28	1	2	1	0	4	1	23	1	0	25	0	1	1	0	2	59
Total	0	42	6	0	48	1	3	2	0	6	2	34	1	0	37	0	1	1	0	2	93
7:00 AM	0	16	1	0	17	0	4	0	0	4	0	9	0	2	11	0	1	0	0	1	33
7:15 AM	0	13	4	0	17	0	0	0	0	0	1	24	0	0	25	1	0	0	0	1	43
7:30 AM	0	11	3	0	14	0	0	0	0	0	1	13	0	0	14	2	0	0	0	2	30
7:45 AM	0	16	2	0	18	0	0	0	0	0	2	9	1	1	13	0	1	0	0	1	32
Total	0	56	10	0	66	0	4	0	0	4	4	55	1	3	63	3	2	0	0	5	138
8:00 AM	1	20	4	0	25	0	0	1	0	1	0	13	1	0	14	0	0	0	0	0	40
8:15 AM	0	20	1	0	21	0	2	0	0	2	2	14	0	0	16	0	0	0	0	0	39
8:30 AM	0	16	4	0	20	0	0	0	0	0	1	17	0	0	18	0	0	0	0	0	38
8:45 AM	0	31	11	0	42	1	0	0	0	1	1	12	1	0	14	0	1	0	0	1	58
Total	1	87	20	0	108	1	2	1	0	4	4	56	2	0	62	0	1	0	0	1	175
9:00 AM	0	20	2	0	22	0	2	1	0	3	0	16	1	1	18	0	0	0	0	0	43
9:15 AM	0	22	2	0	24	0	1	0	0	1	2	24	0	0	26	0	1	0	0	1	52
Total	0	42	4	0	46	0	3	1	0	4	2	40	1	1	44	0	1	0	0	1	95
Grand Total	1	227	40	0	268	2	12	4	0	18	12	185	5	4	206	3	5	1	0	9	501
Approach %	0.4	84.7	14.9	0.0		11.1	66.7	22.2	0.0		5.8	89.8	2.4	1.9		33.3	55.6	11.1	0.0		
Total %	0.2	45.3	8.0	0.0	53.5	0.4	2.4	0.8	0.0	3.6	2.4	36.9	1.0	0.8	41.1	0.6	1.0	0.2	0.0	1.8	
Exiting Leg Total	188					57					238					18					501

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:30 AM	0	16	4	0	20	0	0	0	0	0	1	17	0	0	18	0	0	0	0	0	38
8:45 AM	0	31	11	0	42	1	0	0	0	1	1	12	1	0	14	0	1	0	0	1	58
9:00 AM	0	20	2	0	22	0	2	1	0	3	0	16	1	1	18	0	0	0	0	0	43
9:15 AM	0	22	2	0	24	0	1	0	0	1	2	24	0	0	26	0	1	0	0	1	52
Total Volume	0	89	19	0	108	1	3	1	0	5	4	69	2	1	76	0	2	0	0	2	191
% Approach Total	0.0	82.4	17.6	0.0		20.0	60.0	20.0	0.0		5.3	90.8	2.6	1.3		0.0	100.0	0.0	0.0		
PHF	0.000	0.718	0.432	0.000	0.643	0.250	0.375	0.250	0.000	0.417	0.500	0.719	0.500	0.250	0.731	0.000	0.500	0.000	0.000	0.500	0.823
Entering Leg	0	89	19	0	108	1	3	1	0	5	4	69	2	1	76	0	2	0	0	2	191
Exiting Leg	70					25					91					5					191
Total	178					30					167					7					382

PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Buses

	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	1	1	0	2	0	1	0	0	1	1	3	0	0	4	0	0	0	0	0	7
6:45 AM	0	3	0	0	3	0	3	0	0	3	0	1	0	0	1	0	1	0	0	1	8
Total	0	4	1	0	5	0	4	0	0	4	1	4	0	0	5	0	1	0	0	1	15
7:00 AM	0	3	1	0	4	0	4	0	0	4	0	1	0	0	1	0	2	0	0	2	11
7:15 AM	0	4	1	0	5	0	2	4	0	6	0	5	0	0	5	1	2	0	0	3	19
7:30 AM	0	3	0	0	3	0	1	1	0	2	0	4	0	0	4	1	2	0	0	3	12
7:45 AM	0	3	1	0	4	0	2	0	0	2	0	3	0	0	3	0	0	0	0	0	9
Total	0	13	3	0	16	0	9	5	0	14	0	13	0	0	13	2	6	0	0	8	51
8:00 AM	0	4	0	0	4	0	1	0	0	1	0	4	0	0	4	0	1	0	0	1	10
8:15 AM	0	3	1	0	4	0	3	0	0	3	0	8	1	0	9	0	0	0	0	0	16
8:30 AM	0	5	2	0	7	0	2	0	0	2	0	3	0	0	3	0	2	0	0	2	14
8:45 AM	0	3	0	0	3	1	2	0	0	3	0	3	0	0	3	0	0	0	0	0	9
Total	0	15	3	0	18	1	8	0	0	9	0	18	1	0	19	0	3	0	0	3	49
9:00 AM	0	4	0	0	4	0	0	0	0	0	0	6	0	0	6	0	2	0	0	2	12
9:15 AM	0	2	0	0	2	0	2	0	0	2	0	3	0	0	3	0	1	0	0	1	8
Total	0	6	0	0	6	0	2	0	0	2	0	9	0	0	9	0	3	0	0	3	20
Grand Total	0	38	7	0	45	1	23	5	0	29	1	44	1	0	46	2	13	0	0	15	135
Approach %	0.0	84.4	15.6	0.0		3.4	79.3	17.2	0.0		2.2	95.7	2.2	0.0		13.3	86.7	0.0	0.0		
Total %	0.0	28.1	5.2	0.0	33.3	0.7	17.0	3.7	0.0	21.5	0.7	32.6	0.7	0.0	34.1	1.5	9.6	0.0	0.0	11.1	
Exiting Leg Total	45					21					45					24					135

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	3	1	0	4	0	4	0	0	4	0	1	0	0	1	0	2	0	0	2	11
7:15 AM	0	4	1	0	5	0	2	4	0	6	0	5	0	0	5	1	2	0	0	3	19
7:30 AM	0	3	0	0	3	0	1	1	0	2	0	4	0	0	4	1	2	0	0	3	12
7:45 AM	0	3	1	0	4	0	2	0	0	2	0	3	0	0	3	0	0	0	0	0	9
Total Volume	0	13	3	0	16	0	9	5	0	14	0	13	0	0	13	2	6	0	0	8	51
% Approach Total	0.0	81.3	18.8	0.0		0.0	64.3	35.7	0.0		0.0	100.0	0.0	0.0		25.0	75.0	0.0	0.0		
PHF	0.000	0.813	0.750	0.000	0.800	0.000	0.563	0.313	0.000	0.583	0.000	0.650	0.000	0.000	0.650	0.500	0.750	0.000	0.000	0.667	0.671
Entering Leg	0	13	3	0	16	0	9	5	0	14	0	13	0	0	13	2	6	0	0	8	51
Exiting Leg	13					9					20					9					51
Total	29					23					33					17					102

PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



**Bicycles (on Roadway and Crosswalks)**

	American Legion Highway (Route 60)							Revere Street							American Legion Highway (Route 60)							Revere Street							
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
6:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	1	0	0	0	0	1	4
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	1	2
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	1	2
Grand Total	0	0	0	0	0	0	0	0	1	1	0	0	0	2	1	0	0	0	3	0	4	0	3	0	0	0	0	3	9
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	50.0	50.0	0.0	0.0	0.0		25.0	0.0	0.0	0.0	75.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	11.1	0.0	0.0	0.0	22.2	11.1	0.0	0.0	0.0	33.3	0.0	44.4	0.0	33.3	0.0	0.0	0.0	0.0	33.3	
Exiting Leg Total	0							4							4							1							9

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:15 AM	American Legion Highway (Route 60)							Revere Street							American Legion Highway (Route 60)							Revere Street							
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	2
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	0	2	0	0	0	0	2	6
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		25.0	0.0	0.0	0.0	75.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.375	0.000	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.500	0.750
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	0	2	0	0	0	0	2	6
Exiting Leg	0							3							3							0							6
Total	0							3							7							2							12

PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Pedestrians

	American Legion Highway (Route 60)								Revere Street								American Legion Highway (Route 60)								Revere Street								Total
	North								East								South								West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total					
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	2				
6:45 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	0	0	1	1	7				
Total	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	3	7	0	0	0	0	0	1	1	9				
7:00 AM	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	8	0	8	0	0	0	0	0	0	10					
7:15 AM	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	6	1	7	0	0	0	0	0	0	9					
7:30 AM	0	0	0	0	0	2	2	0	0	0	0	2	0	2	0	0	0	0	25	1	26	0	0	0	0	1	4	5	35				
7:45 AM	0	0	0	0	1	0	1	0	0	0	0	5	0	5	0	0	0	0	10	3	13	0	0	0	0	0	1	1	20				
Total	0	0	0	0	3	2	5	0	0	0	0	9	0	9	0	0	0	0	49	5	54	0	0	0	0	1	5	6	74				
8:00 AM	0	0	0	0	0	1	1	0	0	0	0	2	0	2	0	0	0	0	21	0	21	0	0	0	0	0	5	5	29				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	10	0	10	0	0	0	0	0	0	13					
8:30 AM	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	2	3	5	0	0	0	0	0	0	7					
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	2					
Total	0	0	0	0	1	1	2	0	0	0	0	6	0	6	0	0	0	0	34	3	37	0	0	0	0	0	6	6	51				
9:00 AM	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2					
9:15 AM	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	1	0	1	7				
Total	0	0	0	0	4	1	5	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	1	0	1	9				
Grand Total	0	0	0	0	8	5	13	0	0	0	0	15	0	15	0	0	0	0	90	11	101	0	0	0	0	2	12	14	143				
Approach %	0.0	0.0	0.0	0.0	61.5	38.5		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	89.1	10.9		0.0	0.0	0.0	0.0	14.3	85.7						
Total %	0.0	0.0	0.0	0.0	5.6	3.5	9.1	0.0	0.0	0.0	0.0	10.5	0.0	10.5	0.0	0.0	0.0	0.0	62.9	7.7	70.6	0.0	0.0	0.0	0.0	1.4	8.4	9.8					
Exiting Leg Total	13								15								101								14								143

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:30 AM	American Legion Highway (Route 60)							Revere Street							American Legion Highway (Route 60)							Revere Street							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:30 AM	0	0	0	0	0	2	2	0	0	0	0	2	0	2	0	0	0	0	25	1	26	0	0	0	0	1	4	5	35
7:45 AM	0	0	0	0	1	0	1	0	0	0	0	5	0	5	0	0	0	0	10	3	13	0	0	0	0	0	1	1	20
8:00 AM	0	0	0	0	0	1	1	0	0	0	0	2	0	2	0	0	0	0	21	0	21	0	0	0	0	0	5	5	29
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	10	0	10	0	0	0	0	0	0	0	13
Total Volume	0	0	0	0	1	3	4	0	0	0	0	12	0	12	0	0	0	0	66	4	70	0	0	0	0	1	10	11	97
% Approach Total	0.0	0.0	0.0	0.0	25.0	75.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	94.3	5.7		0.0	0.0	0.0	0.0	9.1	90.9		
PHF	0.000	0.000	0.000	0.000	0.250	0.375	0.500	0.000	0.000	0.000	0.000	0.600	0.000	0.600	0.000	0.000	0.000	0.000	0.660	0.333	0.673	0.000	0.000	0.000	0.000	0.250	0.500	0.550	0.693
Entering Leg	0	0	0	0	1	3	4	0	0	0	0	12	0	12	0	0	0	0	66	4	70	0	0	0	0	1	10	11	97
Exiting Leg	4							12							70							11							97
Total	8							24							140							22							194

PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	1	287	87	4	379	3	44	19	0	66	26	253	24	5	308	17	55	6	0	78	831
3:45 PM	3	241	79	3	326	3	48	26	0	77	24	276	25	7	332	21	60	7	0	88	823
Total	4	528	166	7	705	6	92	45	0	143	50	529	49	12	640	38	115	13	0	166	1654
4:00 PM	5	252	81	6	344	3	48	24	0	75	23	265	28	3	319	14	54	1	0	69	807
4:15 PM	3	211	68	4	286	1	56	20	0	77	26	281	27	3	337	16	50	2	0	68	768
4:30 PM	3	228	72	2	305	3	40	22	0	65	28	224	28	3	283	13	51	4	0	68	721
4:45 PM	1	252	80	4	337	1	57	25	0	83	23	282	19	0	324	13	57	1	0	71	815
Total	12	943	301	16	1272	8	201	91	0	300	100	1052	102	9	1263	56	212	8	0	276	3111
5:00 PM	2	202	77	7	288	4	46	25	0	75	20	242	30	4	296	11	51	6	0	68	727
5:15 PM	3	246	70	3	322	4	50	15	0	69	20	278	23	2	323	13	53	1	0	67	781
5:30 PM	3	223	82	2	310	3	50	24	0	77	22	251	19	3	295	21	40	7	0	68	750
5:45 PM	5	237	89	4	335	2	34	24	0	60	21	252	31	5	309	24	47	4	0	75	779
Total	13	908	318	16	1255	13	180	88	0	281	83	1023	103	14	1223	69	191	18	0	278	3037
6:00 PM	2	226	67	3	298	1	36	19	0	56	26	297	28	5	356	14	43	4	0	61	771
6:15 PM	1	208	79	6	294	4	36	20	0	60	24	276	34	4	338	18	51	3	0	72	764
Total	3	434	146	9	592	5	72	39	0	116	50	573	62	9	694	32	94	7	0	133	1535
Grand Total	32	2813	931	48	3824	32	545	263	0	840	283	3177	316	44	3820	195	612	46	0	853	9337
Approach %	0.8	73.6	24.3	1.3		3.8	64.9	31.3	0.0		7.4	83.2	8.3	1.2		22.9	71.7	5.4	0.0		
Total %	0.3	30.1	10.0	0.5	41.0	0.3	5.8	2.8	0.0	9.0	3.0	34.0	3.4	0.5	40.9	2.1	6.6	0.5	0.0	9.1	
Exiting Leg Total	3303					1826					3315					893					9337
Cars	32	2644	913	48	3637	31	525	258	0	814	279	3005	311	42	3637	194	590	44	0	828	8916
% Cars	100.0	94.0	98.1	100.0	95.1	96.9	96.3	98.1	0.0	96.9	98.6	94.6	98.4	95.5	95.2	99.5	96.4	95.7	0.0	97.1	95.5
Exiting Leg Total	3128					1782					3138					868					8916
Heavy Vehicles	0	116	12	0	128	1	7	3	0	11	4	132	4	2	142	1	5	2	0	8	289
% Heavy Vehicles	0.0	4.1	1.3	0.0	3.3	3.1	1.3	1.1	0.0	1.3	1.4	4.2	1.3	4.5	3.7	0.5	0.8	4.3	0.0	0.9	3.1
Exiting Leg Total	135					21					122					11					289
Buses	0	53	6	0	59	0	13	2	0	15	0	40	1	0	41	0	17	0	0	17	132
% Buses	0.0	1.9	0.6	0.0	1.5	0.0	2.4	0.8	0.0	1.8	0.0	1.3	0.3	0.0	1.1	0.0	2.8	0.0	0.0	2.0	1.4
Exiting Leg Total	40					23					55					14					132

### Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	1	287	87	4	379	3	44	19	0	66	26	253	24	5	308	17	55	6	0	78	831
3:45 PM	3	241	79	3	326	3	48	26	0	77	24	276	25	7	332	21	60	7	0	88	823
4:00 PM	5	252	81	6	344	3	48	24	0	75	23	265	28	3	319	14	54	1	0	69	807
4:15 PM	3	211	68	4	286	1	56	20	0	77	26	281	27	3	337	16	50	2	0	68	768
Total Volume	12	991	315	17	1335	10	196	89	0	295	99	1075	104	18	1296	68	219	16	0	303	3229
% Approach Total	0.9	74.2	23.6	1.3		3.4	66.4	30.2	0.0		7.6	82.9	8.0	1.4		22.4	72.3	5.3	0.0		
PHF	0.600	0.863	0.905	0.708	0.881	0.833	0.875	0.856	0.000	0.958	0.952	0.956	0.929	0.643	0.961	0.810	0.913	0.571	0.000	0.861	0.971
Cars	12	924	305	17	1258	9	185	86	0	280	96	1017	102	17	1232	68	212	14	0	294	3064
Cars %	100.0	93.2	96.8	100.0	94.2	90.0	94.4	96.6	0.0	94.9	97.0	94.6	98.1	94.4	95.1	100.0	96.8	87.5	0.0	97.0	94.9
Heavy Vehicles	0	43	7	0	50	1	6	1	0	8	3	47	2	1	53	0	3	2	0	5	116
Heavy Vehicles %	0.0	4.3	2.2	0.0	3.7	10.0	3.1	1.1	0.0	2.7	3.0	4.4	1.9	5.6	4.1	0.0	1.4	12.5	0.0	1.7	3.6
Buses	0	24	3	0	27	0	5	2	0	7	0	11	0	0	11	0	4	0	0	4	49
Buses %	0.0	2.4	1.0	0.0	2.0	0.0	2.6	2.2	0.0	2.4	0.0	1.0	0.0	0.0	0.8	0.0	1.8	0.0	0.0	1.3	1.5
Cars Enter Leg	12	924	305	17	1258	9	185	86	0	280	96	1017	102	17	1232	68	212	14	0	294	3064
Heavy Enter Leg	0	43	7	0	50	1	6	1	0	8	3	47	2	1	53	0	3	2	0	5	116
Bus Enter Leg	0	24	3	0	27	0	5	2	0	7	0	11	0	0	11	0	4	0	0	4	49
Total Entering Leg	12	991	315	17	1335	10	196	89	0	295	99	1075	104	18	1296	68	219	16	0	303	3229



PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



**Cars, Heavy Vehicles, and Buses (Combined)**

	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
Cars Exiting Leg	1057					613					1095					299					3064
Heavy Exiting Leg	50					13					45					8					116
Buses Exiting Leg	11					7					26					5					49
Total Exiting Leg	1118					633					1166					312					3229

PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars

	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	1	271	86	4	362	2	42	17	0	61	25	235	23	4	287	17	54	6	0	77	787
3:45 PM	3	227	74	3	307	3	44	26	0	73	24	262	25	7	318	21	57	7	0	85	783
Total	4	498	160	7	669	5	86	43	0	134	49	497	48	11	605	38	111	13	0	162	1570
4:00 PM	5	230	79	6	320	3	47	23	0	73	23	251	28	3	305	14	53	0	0	67	765
4:15 PM	3	196	66	4	269	1	52	20	0	73	24	269	26	3	322	16	48	1	0	65	729
4:30 PM	3	210	71	2	286	3	39	22	0	64	28	204	27	3	262	13	48	4	0	65	677
4:45 PM	1	241	78	4	324	1	55	24	0	80	22	264	19	0	305	12	56	1	0	69	778
Total	12	877	294	16	1199	8	193	89	0	290	97	988	100	9	1194	55	205	6	0	266	2949
5:00 PM	2	186	76	7	271	4	44	25	0	73	20	228	30	4	282	11	50	6	0	67	693
5:15 PM	3	230	70	3	306	4	49	15	0	68	20	266	22	2	310	13	50	1	0	64	748
5:30 PM	3	212	82	2	299	3	50	24	0	77	22	242	19	3	286	21	39	7	0	67	729
5:45 PM	5	229	87	4	325	2	34	23	0	59	21	239	30	4	294	24	44	4	0	72	750
Total	13	857	315	16	1201	13	177	87	0	277	83	975	101	13	1172	69	183	18	0	270	2920
6:00 PM	2	215	66	3	286	1	34	19	0	54	26	281	28	5	340	14	42	4	0	60	740
6:15 PM	1	197	78	6	282	4	35	20	0	59	24	264	34	4	326	18	49	3	0	70	737
Total	3	412	144	9	568	5	69	39	0	113	50	545	62	9	666	32	91	7	0	130	1477
Grand Total	32	2644	913	48	3637	31	525	258	0	814	279	3005	311	42	3637	194	590	44	0	828	8916
Approach %	0.9	72.7	25.1	1.3		3.8	64.5	31.7	0.0		7.7	82.6	8.6	1.2		23.4	71.3	5.3	0.0		
Total %	0.4	29.7	10.2	0.5	40.8	0.3	5.9	2.9	0.0	9.1	3.1	33.7	3.5	0.5	40.8	2.2	6.6	0.5	0.0	9.3	
Exiting Leg Total	3128					1782					3138					868					8916

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	1	271	86	4	362	2	42	17	0	61	25	235	23	4	287	17	54	6	0	77	787
3:45 PM	3	227	74	3	307	3	44	26	0	73	24	262	25	7	318	21	57	7	0	85	783
4:00 PM	5	230	79	6	320	3	47	23	0	73	23	251	28	3	305	14	53	0	0	67	765
4:15 PM	3	196	66	4	269	1	52	20	0	73	24	269	26	3	322	16	48	1	0	65	729
Total Volume	12	924	305	17	1258	9	185	86	0	280	96	1017	102	17	1232	68	212	14	0	294	3064
% Approach Total	1.0	73.4	24.2	1.4		3.2	66.1	30.7	0.0		7.8	82.5	8.3	1.4		23.1	72.1	4.8	0.0		
PHF	0.600	0.852	0.887	0.708	0.869	0.750	0.889	0.827	0.000	0.959	0.960	0.945	0.911	0.607	0.957	0.810	0.930	0.500	0.000	0.865	0.973
Entering Leg	12	924	305	17	1258	9	185	86	0	280	96	1017	102	17	1232	68	212	14	0	294	3064
Exiting Leg	1057					613					1095					299					3064
Total	2315					893					2327					593					6128

PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	11	0	0	11	1	1	1	0	3	1	15	1	1	18	0	1	0	0	1	33
3:45 PM	0	9	4	0	13	0	3	0	0	3	0	13	0	0	13	0	1	0	0	1	30
Total	0	20	4	0	24	1	4	1	0	6	1	28	1	1	31	0	2	0	0	2	63
4:00 PM	0	13	2	0	15	0	0	0	0	0	0	8	0	0	8	0	0	1	0	1	24
4:15 PM	0	10	1	0	11	0	2	0	0	2	2	11	1	0	14	0	1	1	0	2	29
4:30 PM	0	12	0	0	12	0	0	0	0	0	0	17	0	0	17	0	1	0	0	1	30
4:45 PM	0	9	1	0	10	0	0	1	0	1	1	15	0	0	16	1	0	0	0	1	28
Total	0	44	4	0	48	0	2	1	0	3	3	51	1	0	55	1	2	2	0	5	111
5:00 PM	0	11	1	0	12	0	1	0	0	1	0	7	0	0	7	0	0	0	0	0	20
5:15 PM	0	11	0	0	11	0	0	0	0	0	0	11	1	0	12	0	0	0	0	0	23
5:30 PM	0	8	0	0	8	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	16
5:45 PM	0	7	1	0	8	0	0	1	0	1	0	7	1	1	9	0	1	0	0	1	19
Total	0	37	2	0	39	0	1	1	0	2	0	33	2	1	36	0	1	0	0	1	78
6:00 PM	0	6	1	0	7	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	17
6:15 PM	0	9	1	0	10	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	20
Total	0	15	2	0	17	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	37
Grand Total	0	116	12	0	128	1	7	3	0	11	4	132	4	2	142	1	5	2	0	8	289
Approach %	0.0	90.6	9.4	0.0		9.1	63.6	27.3	0.0		2.8	93.0	2.8	1.4		12.5	62.5	25.0	0.0		
Total %	0.0	40.1	4.2	0.0	44.3	0.3	2.4	1.0	0.0	3.8	1.4	45.7	1.4	0.7	49.1	0.3	1.7	0.7	0.0	2.8	
Exiting Leg Total	135					21					122					11					289

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	American Legion Highway (Route 60)					Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	11	0	0	11	1	1	1	0	3	1	15	1	1	18	0	1	0	0	1	33
3:45 PM	0	9	4	0	13	0	3	0	0	3	0	13	0	0	13	0	1	0	0	1	30
4:00 PM	0	13	2	0	15	0	0	0	0	0	0	8	0	0	8	0	0	1	0	1	24
4:15 PM	0	10	1	0	11	0	2	0	0	2	2	11	1	0	14	0	1	1	0	2	29
Total Volume	0	43	7	0	50	1	6	1	0	8	3	47	2	1	53	0	3	2	0	5	116
% Approach Total	0.0	86.0	14.0	0.0		12.5	75.0	12.5	0.0		5.7	88.7	3.8	1.9		0.0	60.0	40.0	0.0		
PHF	0.000	0.827	0.438	0.000	0.833	0.250	0.500	0.250	0.000	0.667	0.375	0.783	0.500	0.250	0.736	0.000	0.750	0.500	0.000	0.625	0.879
Entering Leg	0	43	7	0	50	1	6	1	0	8	3	47	2	1	53	0	3	2	0	5	116
Exiting Leg	50					13					45					8					116
Total	100					21					98					13					232

PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	American Legion Highway (Route 60)						Revere Street						American Legion Highway (Route 60)						Revere Street						Total
	North						East						South						West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total					
3:30 PM	0	5	1	0	6	0	1	1	0	2	0	3	0	0	3	0	0	0	0	0	11				
3:45 PM	0	5	1	0	6	0	1	0	0	1	0	1	0	0	1	0	2	0	0	2	10				
Total	0	10	2	0	12	0	2	1	0	3	0	4	0	0	4	0	2	0	0	2	21				
4:00 PM	0	9	0	0	9	0	1	1	0	2	0	6	0	0	6	0	1	0	0	1	18				
4:15 PM	0	5	1	0	6	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	10				
4:30 PM	0	6	1	0	7	0	1	0	0	1	0	3	1	0	4	0	2	0	0	2	14				
4:45 PM	0	2	1	0	3	0	2	0	0	2	0	3	0	0	3	0	1	0	0	1	9				
Total	0	22	3	0	25	0	6	1	0	7	0	13	1	0	14	0	5	0	0	5	51				
5:00 PM	0	5	0	0	5	0	1	0	0	1	0	7	0	0	7	0	1	0	0	1	14				
5:15 PM	0	5	0	0	5	0	1	0	0	1	0	1	0	0	1	0	3	0	0	3	10				
5:30 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	5				
5:45 PM	0	1	1	0	2	0	0	0	0	0	0	6	0	0	6	0	2	0	0	2	10				
Total	0	14	1	0	15	0	2	0	0	2	0	15	0	0	15	0	7	0	0	7	39				
6:00 PM	0	5	0	0	5	0	2	0	0	2	0	6	0	0	6	0	1	0	0	1	14				
6:15 PM	0	2	0	0	2	0	1	0	0	1	0	2	0	0	2	0	2	0	0	2	7				
Total	0	7	0	0	7	0	3	0	0	3	0	8	0	0	8	0	3	0	0	3	21				
Grand Total	0	53	6	0	59	0	13	2	0	15	0	40	1	0	41	0	17	0	0	17	132				
Approach %	0.0	89.8	10.2	0.0		0.0	86.7	13.3	0.0		0.0	97.6	2.4	0.0		0.0	100.0	0.0	0.0						
Total %	0.0	40.2	4.5	0.0	44.7	0.0	9.8	1.5	0.0	11.4	0.0	30.3	0.8	0.0	31.1	0.0	12.9	0.0	0.0	12.9					
Exiting Leg Total	40						23						55						14						132

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:45 PM	American Legion Highway (Route 60)						Revere Street					American Legion Highway (Route 60)					Revere Street					Total
	North						East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
3:45 PM	0	5	1	0	6	0	1	0	0	1	0	1	0	0	1	0	2	0	0	2	10	
4:00 PM	0	9	0	0	9	0	1	1	0	2	0	6	0	0	6	0	1	0	0	1	18	
4:15 PM	0	5	1	0	6	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	10	
4:30 PM	0	6	1	0	7	0	1	0	0	1	0	3	1	0	4	0	2	0	0	2	14	
Total Volume	0	25	3	0	28	0	5	1	0	6	0	11	1	0	12	0	6	0	0	6	52	
% Approach Total	0.0	89.3	10.7	0.0		0.0	83.3	16.7	0.0		0.0	91.7	8.3	0.0		0.0	100.0	0.0	0.0			
PHF	0.000	0.694	0.750	0.000	0.778	0.000	0.625	0.250	0.000	0.750	0.000	0.458	0.250	0.000	0.500	0.000	0.750	0.000	0.000	0.750	0.722	
Entering Leg	0	25	3	0	28	0	5	1	0	6	0	11	1	0	12	0	6	0	0	6	52	
Exiting Leg	11					9					26					6					52	
Total	39					15					38					12					104	



PDI File #: **175607 (17)**  
 Location: **N: American Legion Highway (Route 60) S: American Legion Highway (Route 60)**  
 Location: **E: Revere Street W: Revere Street**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Pedestrians

	American Legion Highway (Route 60)							Revere Street							American Legion Highway (Route 60)							Revere Street							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	0	3	4	7	0	0	0	0	1	0	1	10
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	2	0	0	0	0	0	0	0	3
Total	0	0	0	0	1	0	1	0	0	0	0	0	2	2	0	0	0	0	3	6	9	0	0	0	0	1	0	1	13
4:00 PM	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	1	4	5	0	0	0	0	1	0	1	8
4:15 PM	0	0	0	0	0	1	1	0	0	0	0	3	1	4	0	0	0	0	3	1	4	0	0	0	0	0	0	0	9
4:30 PM	0	0	0	0	1	1	2	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2	1	3	7
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	3	2	5	0	0	0	0	5	1	6	0	0	0	0	5	5	10	0	0	0	0	3	1	4	25
5:00 PM	0	0	0	0	0	3	3	0	0	0	0	0	2	2	0	0	0	0	1	5	6	0	0	0	0	0	1	1	12
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	4	5	0	0	0	0	1	0	1	7
5:30 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	5	2	7	0	0	0	0	0	1	1	9
Total	0	0	0	0	1	3	4	0	0	0	0	2	2	4	0	0	0	0	8	12	20	0	0	0	0	1	2	3	31
6:00 PM	0	0	0	0	1	1	2	0	0	0	0	0	1	1	0	0	0	0	1	5	6	0	0	0	0	0	0	0	9
6:15 PM	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	4
Total	0	0	0	0	2	2	4	0	0	0	0	0	1	1	0	0	0	0	2	6	8	0	0	0	0	0	0	0	13
Grand Total	0	0	0	0	7	7	14	0	0	0	0	7	6	13	0	0	0	0	18	29	47	0	0	0	0	5	3	8	82
Approach %	0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	53.8	46.2		0.0	0.0	0.0	0.0	38.3	61.7		0.0	0.0	0.0	0.0	62.5	37.5		
Total %	0.0	0.0	0.0	0.0	8.5	8.5	17.1	0.0	0.0	0.0	0.0	8.5	7.3	15.9	0.0	0.0	0.0	0.0	22.0	35.4	57.3	0.0	0.0	0.0	0.0	6.1	3.7	9.8	
Exiting Leg Total	14							13							47							8							82

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

5:00 PM	American Legion Highway (Route 60)							Revere Street							American Legion Highway (Route 60)							Revere Street							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
5:00 PM	0	0	0	0	0	3	3	0	0	0	0	0	2	2	0	0	0	0	1	5	6	0	0	0	0	0	1	1	12
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	4	5	0	0	0	0	1	0	1	7
5:30 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	5	2	7	0	0	0	0	0	1	1	9
Total Volume	0	0	0	0	1	3	4	0	0	0	0	2	2	4	0	0	0	0	8	12	20	0	0	0	0	1	2	3	31
% Approach Total	0.0	0.0	0.0	0.0	25.0	75.0		0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	40.0	60.0		0.0	0.0	0.0	0.0	33.3	66.7		
PHF	0.000	0.000	0.000	0.000	0.250	0.250	0.333	0.000	0.000	0.000	0.000	0.500	0.250	0.500	0.000	0.000	0.000	0.000	0.400	0.600	0.714	0.000	0.000	0.000	0.000	0.250	0.500	0.750	0.646
Entering Leg	0	0	0	0	1	3	4	0	0	0	0	2	2	4	0	0	0	0	8	12	20	0	0	0	0	1	2	3	31
Exiting Leg	4							4							20							3							31
Total	8							8							40							6							62

PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	0	0	0	0	257	0	0	257	358	129	0	487	744
6:45 AM	0	0	0	0	257	0	0	257	338	119	0	457	714
Total	0	0	0	0	514	0	0	514	696	248	0	944	1458
7:00 AM	0	0	0	0	272	0	0	272	322	157	0	479	751
7:15 AM	0	0	0	0	315	0	0	315	354	157	0	511	826
7:30 AM	0	0	0	0	311	0	0	311	356	173	0	529	840
7:45 AM	0	0	0	0	305	0	0	305	361	164	0	525	830
Total	0	0	0	0	1203	0	0	1203	1393	651	0	2044	3247
8:00 AM	0	0	0	0	321	0	0	321	384	173	0	557	878
8:15 AM	0	0	0	0	316	0	0	316	359	169	0	528	844
8:30 AM	0	0	0	0	292	0	0	292	326	164	0	490	782
8:45 AM	0	0	0	0	299	0	0	299	357	128	0	485	784
Total	0	0	0	0	1228	0	0	1228	1426	634	0	2060	3288
9:00 AM	0	0	0	0	298	0	0	298	320	159	0	479	777
9:15 AM	0	0	0	0	302	0	0	302	295	136	0	431	733
Total	0	0	0	0	600	0	0	600	615	295	0	910	1510
Grand Total	0	0	0	0	3545	0	0	3545	4130	1828	0	5958	9503
Approach %	0.0	0.0	0.0		100.0	0.0	0.0		69.3	30.7	0.0		
Total %	0.0	0.0	0.0	0.0	37.3	0.0	0.0	37.3	43.5	19.2	0.0	62.7	
Exiting Leg Total	5373				4130				0				9503
Cars	0	0	0	0	3268	0	0	3268	3818	1731	0	5549	8817
% Cars	0.0	0.0	0.0	0.0	92.2	0.0	0.0	92.2	92.4	94.7	0.0	93.1	92.8
Exiting Leg Total	4999				3818				0				8817
Heavy Vehicles	0	0	0	0	216	0	0	216	258	85	0	343	559
% Heavy Vehicles	0.0	0.0	0.0	0.0	6.1	0.0	0.0	6.1	6.2	4.6	0.0	5.8	5.9
Exiting Leg Total	301				258				0				559
Buses	0	0	0	0	61	0	0	61	54	12	0	66	127
% Buses	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.7	1.3	0.7	0.0	1.1	1.3
Exiting Leg Total	73				54				0				127

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:30 AM	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:30 AM	0	0	0	0	311	0	0	311	356	173	0	529	840
7:45 AM	0	0	0	0	305	0	0	305	361	164	0	525	830
8:00 AM	0	0	0	0	321	0	0	321	384	173	0	557	878
8:15 AM	0	0	0	0	316	0	0	316	359	169	0	528	844
Total Volume	0	0	0	0	1253	0	0	1253	1460	679	0	2139	3392
% Approach Total	0.0	0.0	0.0		100.0	0.0	0.0		68.3	31.7	0.0		
PHF	0.000	0.000	0.000	0.000	0.976	0.000	0.000	0.976	0.951	0.981	0.000	0.960	0.966
Cars	0	0	0	0	1167	0	0	1167	1367	640	0	2007	3174
Cars %	0.0	0.0	0.0	0.0	93.1	0.0	0.0	93.1	93.6	94.3	0.0	93.8	93.6
Heavy Vehicles	0	0	0	0	62	0	0	62	78	31	0	109	171
Heavy Vehicles %	0.0	0.0	0.0	0.0	4.9	0.0	0.0	4.9	5.3	4.6	0.0	5.1	5.0
Buses	0	0	0	0	24	0	0	24	15	8	0	23	47
Buses %	0.0	0.0	0.0	0.0	1.9	0.0	0.0	1.9	1.0	1.2	0.0	1.1	1.4
Cars Enter Leg	0	0	0	0	1167	0	0	1167	1367	640	0	2007	3174
Heavy Enter Leg	0	0	0	0	62	0	0	62	78	31	0	109	171
Bus Enter Leg	0	0	0	0	24	0	0	24	15	8	0	23	47
Total Entering Leg	0	0	0	0	1253	0	0	1253	1460	679	0	2139	3392
Cars Exiting Leg	1807				1367				0				3174

PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Heavy Exiting Leg	93				78				0				171
Buses Exiting Leg	32				15				0				47
Total Exiting Leg	1932				1460				0				3392



PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Cars

	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	0	0	0	0	242	0	0	242	333	124	0	457	699
6:45 AM	0	0	0	0	231	0	0	231	312	115	0	427	658
Total	0	0	0	0	473	0	0	473	645	239	0	884	1357
7:00 AM	0	0	0	0	257	0	0	257	301	155	0	456	713
7:15 AM	0	0	0	0	290	0	0	290	333	151	0	484	774
7:30 AM	0	0	0	0	289	0	0	289	334	166	0	500	789
7:45 AM	0	0	0	0	290	0	0	290	347	154	0	501	791
Total	0	0	0	0	1126	0	0	1126	1315	626	0	1941	3067
8:00 AM	0	0	0	0	300	0	0	300	352	162	0	514	814
8:15 AM	0	0	0	0	288	0	0	288	334	158	0	492	780
8:30 AM	0	0	0	0	269	0	0	269	300	152	0	452	721
8:45 AM	0	0	0	0	271	0	0	271	318	123	0	441	712
Total	0	0	0	0	1128	0	0	1128	1304	595	0	1899	3027
9:00 AM	0	0	0	0	268	0	0	268	285	148	0	433	701
9:15 AM	0	0	0	0	273	0	0	273	269	123	0	392	665
Total	0	0	0	0	541	0	0	541	554	271	0	825	1366
Grand Total	0	0	0	0	3268	0	0	3268	3818	1731	0	5549	8817
Approach %	0.0	0.0	0.0		100.0	0.0	0.0		68.8	31.2	0.0		
Total %	0.0	0.0	0.0	0.0	37.1	0.0	0.0	37.1	43.3	19.6	0.0	62.9	
Exiting Leg Total	4999				3818				0				8817

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:30 AM	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:30 AM	0	0	0	0	289	0	0	289	334	166	0	500	789
7:45 AM	0	0	0	0	290	0	0	290	347	154	0	501	791
8:00 AM	0	0	0	0	300	0	0	300	352	162	0	514	814
8:15 AM	0	0	0	0	288	0	0	288	334	158	0	492	780
Total Volume	0	0	0	0	1167	0	0	1167	1367	640	0	2007	3174
% Approach Total	0.0	0.0	0.0		100.0	0.0	0.0		68.1	31.9	0.0		
PHF	0.000	0.000	0.000	0.000	0.973	0.000	0.000	0.973	0.971	0.964	0.000	0.976	0.975
Entering Leg	0	0	0	0	1167	0	0	1167	1367	640	0	2007	3174
Exiting Leg				1807				1367				0	3174
Total				1807				2534				2007	6348

PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	0	0	0	0	9	0	0	9	22	4	0	26	35
6:45 AM	0	0	0	0	23	0	0	23	21	4	0	25	48
Total	0	0	0	0	32	0	0	32	43	8	0	51	83
7:00 AM	0	0	0	0	12	0	0	12	16	1	0	17	29
7:15 AM	0	0	0	0	20	0	0	20	16	6	0	22	42
7:30 AM	0	0	0	0	18	0	0	18	18	5	0	23	41
7:45 AM	0	0	0	0	11	0	0	11	11	8	0	19	30
Total	0	0	0	0	61	0	0	61	61	20	0	81	142
8:00 AM	0	0	0	0	14	0	0	14	28	8	0	36	50
8:15 AM	0	0	0	0	19	0	0	19	21	10	0	31	50
8:30 AM	0	0	0	0	21	0	0	21	20	11	0	31	52
8:45 AM	0	0	0	0	22	0	0	22	36	5	0	41	63
Total	0	0	0	0	76	0	0	76	105	34	0	139	215
9:00 AM	0	0	0	0	19	0	0	19	26	10	0	36	55
9:15 AM	0	0	0	0	28	0	0	28	23	13	0	36	64
Total	0	0	0	0	47	0	0	47	49	23	0	72	119
Grand Total	0	0	0	0	216	0	0	216	258	85	0	343	559
Approach %	0.0	0.0	0.0		100.0	0.0	0.0		75.2	24.8	0.0		
Total %	0.0	0.0	0.0	0.0	38.6	0.0	0.0	38.6	46.2	15.2	0.0	61.4	
Exiting Leg Total	301				258				0				559

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
8:30 AM	0	0	0	0	21	0	0	21	20	11	0	31	52
8:45 AM	0	0	0	0	22	0	0	22	36	5	0	41	63
9:00 AM	0	0	0	0	19	0	0	19	26	10	0	36	55
9:15 AM	0	0	0	0	28	0	0	28	23	13	0	36	64
Total Volume	0	0	0	0	90	0	0	90	105	39	0	144	234
% Approach Total	0.0	0.0	0.0		100.0	0.0	0.0		72.9	27.1	0.0		
PHF	0.000	0.000	0.000	0.000	0.804	0.000	0.000	0.804	0.729	0.750	0.000	0.878	0.914
Entering Leg	0	0	0	0	90	0	0	90	105	39	0	144	234
Exiting Leg				129				105				0	234
Total				129				195				144	468

PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Buses

	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	0	0	0	0	6	0	0	6	3	1	0	4	10
6:45 AM	0	0	0	0	3	0	0	3	5	0	0	5	8
Total	0	0	0	0	9	0	0	9	8	1	0	9	18
7:00 AM	0	0	0	0	3	0	0	3	5	1	0	6	9
7:15 AM	0	0	0	0	5	0	0	5	5	0	0	5	10
7:30 AM	0	0	0	0	4	0	0	4	4	2	0	6	10
7:45 AM	0	0	0	0	4	0	0	4	3	2	0	5	9
Total	0	0	0	0	16	0	0	16	17	5	0	22	38
8:00 AM	0	0	0	0	7	0	0	7	4	3	0	7	14
8:15 AM	0	0	0	0	9	0	0	9	4	1	0	5	14
8:30 AM	0	0	0	0	2	0	0	2	6	1	0	7	9
8:45 AM	0	0	0	0	6	0	0	6	3	0	0	3	9
Total	0	0	0	0	24	0	0	24	17	5	0	22	46
9:00 AM	0	0	0	0	11	0	0	11	9	1	0	10	21
9:15 AM	0	0	0	0	1	0	0	1	3	0	0	3	4
Total	0	0	0	0	12	0	0	12	12	1	0	13	25
Grand Total	0	0	0	0	61	0	0	61	54	12	0	66	127
Approach %	0.0	0.0	0.0		100.0	0.0	0.0		81.8	18.2	0.0		
Total %	0.0	0.0	0.0	0.0	48.0	0.0	0.0	48.0	42.5	9.4	0.0	52.0	
Exiting Leg Total	73				54				0				127

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:15 AM	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
8:15 AM	0	0	0	0	9	0	0	9	4	1	0	5	14
8:30 AM	0	0	0	0	2	0	0	2	6	1	0	7	9
8:45 AM	0	0	0	0	6	0	0	6	3	0	0	3	9
9:00 AM	0	0	0	0	11	0	0	11	9	1	0	10	21
Total Volume	0	0	0	0	28	0	0	28	22	3	0	25	53
% Approach Total	0.0	0.0	0.0		100.0	0.0	0.0		88.0	12.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.636	0.000	0.000	0.636	0.611	0.750	0.000	0.625	0.631
Entering Leg	0	0	0	0	28	0	0	28	22	3	0	25	53
Exiting Leg				31				22				0	53
Total				31				50				25	106

PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



**Bicycles (on Roadway and Crosswalks)**

	Rotary						American Legion Highway (Route 60)						Rotary						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0						0						0						0	

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:30 AM	Rotary						American Legion Highway (Route 60)							Rotary							Total
	North						East							South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total			
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg	0						0							0							0
Total	0						0							0							0

PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



**Pedestrians**

	Rotary						American Legion Highway (Route 60)						Rotary						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0						1						0						1	

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:30 AM	Rotary						American Legion Highway (Route 60)						Rotary						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0			0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Exiting Leg	0						1						0						1	
Total	0						2						0						2	

PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	0	0	0	0	371	0	0	371	366	252	0	618	989
3:45 PM	0	0	0	0	414	0	0	414	343	262	0	605	1019
Total	0	0	0	0	785	0	0	785	709	514	0	1223	2008
4:00 PM	0	0	0	0	374	0	0	374	321	283	0	604	978
4:15 PM	0	0	0	0	370	0	0	370	286	303	0	589	959
4:30 PM	0	0	0	0	399	0	0	399	322	269	0	591	990
4:45 PM	0	0	0	0	388	0	0	388	317	287	0	604	992
Total	0	0	0	0	1531	0	0	1531	1246	1142	0	2388	3919
5:00 PM	0	0	0	0	422	0	0	422	302	296	0	598	1020
5:15 PM	0	0	0	0	398	0	0	398	327	308	0	635	1033
5:30 PM	0	0	0	0	419	0	0	419	327	284	0	611	1030
5:45 PM	0	0	0	0	437	0	0	437	307	265	0	572	1009
Total	0	0	0	0	1676	0	0	1676	1263	1153	0	2416	4092
6:00 PM	0	0	0	0	401	0	0	401	310	285	0	595	996
6:15 PM	0	0	0	0	423	0	0	423	307	277	0	584	1007
Total	0	0	0	0	824	0	0	824	617	562	0	1179	2003
Grand Total	0	0	0	0	4816	0	0	4816	3835	3371	0	7206	12022
Approach %	0.0	0.0	0.0		100.0	0.0	0.0		53.2	46.8	0.0		
Total %	0.0	0.0	0.0	0.0	40.1	0.0	0.0	40.1	31.9	28.0	0.0	59.9	
Exiting Leg Total	8187				3835				0				12022
Cars	0	0	0	0	4615	0	0	4615	3659	3281	0	6940	11555
% Cars	0.0	0.0	0.0	0.0	95.8	0.0	0.0	95.8	95.4	97.3	0.0	96.3	96.1
Exiting Leg Total	7896				3659				0				11555
Heavy Vehicles	0	0	0	0	147	0	0	147	117	73	0	190	337
% Heavy Vehicles	0.0	0.0	0.0	0.0	3.1	0.0	0.0	3.1	3.1	2.2	0.0	2.6	2.8
Exiting Leg Total	220				117				0				337
Buses	0	0	0	0	54	0	0	54	59	17	0	76	130
% Buses	0.0	0.0	0.0	0.0	1.1	0.0	0.0	1.1	1.5	0.5	0.0	1.1	1.1
Exiting Leg Total	71				59				0				130

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

5:00 PM	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:00 PM	0	0	0	0	422	0	0	422	302	296	0	598	1020
5:15 PM	0	0	0	0	398	0	0	398	327	308	0	635	1033
5:30 PM	0	0	0	0	419	0	0	419	327	284	0	611	1030
5:45 PM	0	0	0	0	437	0	0	437	307	265	0	572	1009
Total Volume	0	0	0	0	1676	0	0	1676	1263	1153	0	2416	4092
% Approach Total	0.0	0.0	0.0		100.0	0.0	0.0		52.3	47.7	0.0		
PHF	0.000	0.000	0.000	0.000	0.959	0.000	0.000	0.959	0.966	0.936	0.000	0.951	0.990
Cars	0	0	0	0	1621	0	0	1621	1212	1136	0	2348	3969
Cars %	0.0	0.0	0.0	0.0	96.7	0.0	0.0	96.7	96.0	98.5	0.0	97.2	97.0
Heavy Vehicles	0	0	0	0	37	0	0	37	36	16	0	52	89
Heavy Vehicles %	0.0	0.0	0.0	0.0	2.2	0.0	0.0	2.2	2.9	1.4	0.0	2.2	2.2
Buses	0	0	0	0	18	0	0	18	15	1	0	16	34
Buses %	0.0	0.0	0.0	0.0	1.1	0.0	0.0	1.1	1.2	0.1	0.0	0.7	0.8
Cars Enter Leg	0	0	0	0	1621	0	0	1621	1212	1136	0	2348	3969
Heavy Enter Leg	0	0	0	0	37	0	0	37	36	16	0	52	89
Bus Enter Leg	0	0	0	0	18	0	0	18	15	1	0	16	34
Total Entering Leg	0	0	0	0	1676	0	0	1676	1263	1153	0	2416	4092

PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



Class: **Cars, Heavy Vehicles, and Buses (Combined)**

	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Cars Exiting Leg	2757				1212				0				3969
Heavy Exiting Leg	53				36				0				89
Buses Exiting Leg	19				15				0				34
Total Exiting Leg	2829				1263				0				4092

PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars

	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	0	0	0	0	347	0	0	347	350	241	0	591	938
3:45 PM	0	0	0	0	401	0	0	401	327	249	0	576	977
Total	0	0	0	0	748	0	0	748	677	490	0	1167	1915
4:00 PM	0	0	0	0	359	0	0	359	299	271	0	570	929
4:15 PM	0	0	0	0	351	0	0	351	271	287	0	558	909
4:30 PM	0	0	0	0	377	0	0	377	304	258	0	562	939
4:45 PM	0	0	0	0	367	0	0	367	303	279	0	582	949
Total	0	0	0	0	1454	0	0	1454	1177	1095	0	2272	3726
5:00 PM	0	0	0	0	405	0	0	405	287	292	0	579	984
5:15 PM	0	0	0	0	386	0	0	386	312	302	0	614	1000
5:30 PM	0	0	0	0	406	0	0	406	316	278	0	594	1000
5:45 PM	0	0	0	0	424	0	0	424	297	264	0	561	985
Total	0	0	0	0	1621	0	0	1621	1212	1136	0	2348	3969
6:00 PM	0	0	0	0	385	0	0	385	297	285	0	582	967
6:15 PM	0	0	0	0	407	0	0	407	296	275	0	571	978
Total	0	0	0	0	792	0	0	792	593	560	0	1153	1945
Grand Total	0	0	0	0	4615	0	0	4615	3659	3281	0	6940	11555
Approach %	0.0	0.0	0.0		100.0	0.0	0.0		52.7	47.3	0.0		
Total %	0.0	0.0	0.0	0.0	39.9	0.0	0.0	39.9	31.7	28.4	0.0	60.1	
Exiting Leg Total	7896				3659				0				11555

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

5:00 PM	Rotary					American Legion Highway (Route 60)				Rotary				Total
	North					East				South				
	Thru	Left	U-Turn	Total		Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:00 PM	0	0	0	0		405	0	0	405	287	292	0	579	984
5:15 PM	0	0	0	0		386	0	0	386	312	302	0	614	1000
5:30 PM	0	0	0	0		406	0	0	406	316	278	0	594	1000
5:45 PM	0	0	0	0		424	0	0	424	297	264	0	561	985
Total Volume	0	0	0	0		1621	0	0	1621	1212	1136	0	2348	3969
% Approach Total	0.0	0.0	0.0			100.0	0.0	0.0		51.6	48.4	0.0		
PHF	0.000	0.000	0.000	0.000		0.956	0.000	0.000	0.956	0.959	0.940	0.000	0.956	0.992
Entering Leg	0	0	0	0		1621	0	0	1621	1212	1136	0	2348	3969
Exiting Leg	2757					1212				0				3969
Total	2757					2833				2348				7938



PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	0	0	0	0	20	0	0	20	10	11	0	21	41
3:45 PM	0	0	0	0	12	0	0	12	10	10	0	20	32
Total	0	0	0	0	32	0	0	32	20	21	0	41	73
4:00 PM	0	0	0	0	10	0	0	10	12	10	0	22	32
4:15 PM	0	0	0	0	9	0	0	9	9	9	0	18	27
4:30 PM	0	0	0	0	19	0	0	19	12	9	0	21	40
4:45 PM	0	0	0	0	17	0	0	17	11	6	0	17	34
Total	0	0	0	0	55	0	0	55	44	34	0	78	133
5:00 PM	0	0	0	0	10	0	0	10	9	4	0	13	23
5:15 PM	0	0	0	0	11	0	0	11	11	5	0	16	27
5:30 PM	0	0	0	0	11	0	0	11	8	6	0	14	25
5:45 PM	0	0	0	0	5	0	0	5	8	1	0	9	14
Total	0	0	0	0	37	0	0	37	36	16	0	52	89
6:00 PM	0	0	0	0	11	0	0	11	8	0	0	8	19
6:15 PM	0	0	0	0	12	0	0	12	9	2	0	11	23
Total	0	0	0	0	23	0	0	23	17	2	0	19	42
Grand Total	0	0	0	0	147	0	0	147	117	73	0	190	337
Approach %	0.0	0.0	0.0		100.0	0.0	0.0		61.6	38.4	0.0		
Total %	0.0	0.0	0.0	0.0	43.6	0.0	0.0	43.6	34.7	21.7	0.0	56.4	
Exiting Leg Total	220				117				0				337

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:00 PM	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	0	0	0	0	10	0	0	10	12	10	0	22	32
4:15 PM	0	0	0	0	9	0	0	9	9	9	0	18	27
4:30 PM	0	0	0	0	19	0	0	19	12	9	0	21	40
4:45 PM	0	0	0	0	17	0	0	17	11	6	0	17	34
Total Volume	0	0	0	0	55	0	0	55	44	34	0	78	133
% Approach Total	0.0	0.0	0.0		100.0	0.0	0.0		56.4	43.6	0.0		
PHF	0.000	0.000	0.000	0.000	0.724	0.000	0.000	0.724	0.917	0.850	0.000	0.886	0.831
Entering Leg	0	0	0	0	55	0	0	55	44	34	0	78	133
Exiting Leg				89				44				0	133
Total				89				99				78	266

PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	0	0	0	0	4	0	0	4	6	0	0	6	10
3:45 PM	0	0	0	0	1	0	0	1	6	3	0	9	10
Total	0	0	0	0	5	0	0	5	12	3	0	15	20
4:00 PM	0	0	0	0	5	0	0	5	10	2	0	12	17
4:15 PM	0	0	0	0	10	0	0	10	6	7	0	13	23
4:30 PM	0	0	0	0	3	0	0	3	6	2	0	8	11
4:45 PM	0	0	0	0	4	0	0	4	3	2	0	5	9
Total	0	0	0	0	22	0	0	22	25	13	0	38	60
5:00 PM	0	0	0	0	7	0	0	7	6	0	0	6	13
5:15 PM	0	0	0	0	1	0	0	1	4	1	0	5	6
5:30 PM	0	0	0	0	2	0	0	2	3	0	0	3	5
5:45 PM	0	0	0	0	8	0	0	8	2	0	0	2	10
Total	0	0	0	0	18	0	0	18	15	1	0	16	34
6:00 PM	0	0	0	0	5	0	0	5	5	0	0	5	10
6:15 PM	0	0	0	0	4	0	0	4	2	0	0	2	6
Total	0	0	0	0	9	0	0	9	7	0	0	7	16
Grand Total	0	0	0	0	54	0	0	54	59	17	0	76	130
Approach %	0.0	0.0	0.0		100.0	0.0	0.0		77.6	22.4	0.0		
Total %	0.0	0.0	0.0	0.0	41.5	0.0	0.0	41.5	45.4	13.1	0.0	58.5	
Exiting Leg Total	71				59				0				130

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:45 PM	Rotary				American Legion Highway (Route 60)				Rotary				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:45 PM	0	0	0	0	1	0	0	1	6	3	0	9	10
4:00 PM	0	0	0	0	5	0	0	5	10	2	0	12	17
4:15 PM	0	0	0	0	10	0	0	10	6	7	0	13	23
4:30 PM	0	0	0	0	3	0	0	3	6	2	0	8	11
Total Volume	0	0	0	0	19	0	0	19	28	14	0	42	61
% Approach Total	0.0	0.0	0.0		100.0	0.0	0.0		66.7	33.3	0.0		
PHF	0.000	0.000	0.000	0.000	0.475	0.000	0.000	0.475	0.700	0.500	0.000	0.808	0.663
Entering Leg	0	0	0	0	19	0	0	19	28	14	0	42	61
Exiting Leg				33				28				0	61
Total				33				47				42	122

PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



**Bicycles (on Roadway and Crosswalks)**

	Rotary						American Legion Highway (Route 60)						Rotary						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	1	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
6:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	1	2
Grand Total	0	0	0	0	0	0	0	2	0	0	0	0	2	0	1	0	1	0	2	4
Approach %	0.0	0.0	0.0	0.0	0.0			100.0	0.0	0.0	0.0	0.0		0.0	50.0	0.0	50.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0		50.0	0.0	0.0	0.0	0.0	50.0	0.0	25.0	0.0	25.0	0.0	50.0	
Exiting Leg Total	3						0						1						4	

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:00 PM	Rotary						American Legion Highway (Route 60)						Rotary						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	1	2
% Approach Total	0.0	0.0	0.0	0.0	0.0			100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000		0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.500
Entering Leg	0	0	0	0	0	0		1	0	0	0	0	1	0	0	0	1	0	1	2
Exiting Leg	1						0						1						2	
Total	1						1						2						4	

PDI File #: **175607 (18)**  
 Location: **N: Rotary S: Rotary**  
 Location: **E: American Legion Highway (Route 60)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Pedestrians

	Rotary						American Legion Highway (Route 60)						Rotary						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	0	5	1	6	0	0	0	0	0	0	6
Approach %	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	83.3	16.7		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	83.3	16.7	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0						6						0						6	

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:30 PM	Rotary						American Legion Highway (Route 60)						Rotary						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	3
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	3
Exiting Leg	0						3						0						3	
Total	0						6						0						6	

PDI File #: **175607 (31)**  
 Location: **N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



**Cars, Heavy Vehicles, and Buses (Combined)**

	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
6:30 AM	1	1	127	0	0	129	9	6	34	237	1	287	137	83	0	0	0	220	5	61	0	0	0	66	0	8	30	0	0	38	740
6:45 AM	0	2	156	0	0	158	7	5	38	213	0	263	152	95	0	0	0	247	7	52	2	0	0	61	0	14	26	0	0	40	769
Total	1	3	283	0	0	287	16	11	72	450	1	550	289	178	0	0	0	467	12	113	2	0	0	127	0	22	56	0	0	78	1509
7:00 AM	0	0	146	1	0	147	12	9	55	195	0	271	152	97	0	0	0	249	4	76	4	0	0	84	0	10	38	1	0	49	800
7:15 AM	0	1	141	0	0	142	21	10	85	212	0	328	217	102	0	0	0	319	5	67	8	0	0	80	0	7	49	0	0	56	925
7:30 AM	0	1	96	0	0	97	18	18	83	207	1	327	185	79	0	0	0	264	6	59	4	0	0	69	0	6	43	0	0	49	806
7:45 AM	0	1	101	0	0	102	27	15	74	226	0	342	197	153	0	0	0	350	5	69	8	0	0	82	0	4	47	0	0	51	927
Total	0	3	484	1	0	488	78	52	297	840	1	1268	751	431	0	0	0	1182	20	271	24	0	0	315	0	27	177	1	0	205	3458
8:00 AM	0	0	75	0	0	75	20	22	99	249	0	390	211	105	0	0	0	316	8	68	6	0	0	82	0	3	57	0	0	60	923
8:15 AM	1	0	97	0	0	98	16	13	53	185	0	267	205	130	0	0	0	335	7	76	1	0	0	84	0	8	51	0	0	59	843
8:30 AM	0	0	99	0	0	99	27	9	61	189	0	286	217	129	0	0	0	346	2	67	2	0	0	71	0	7	49	0	0	56	858
8:45 AM	1	1	123	0	0	125	17	4	48	183	0	252	190	132	0	0	0	322	7	48	0	0	0	55	1	4	25	0	0	30	784
Total	2	1	394	0	0	397	80	48	261	806	0	1195	823	496	0	0	0	1319	24	259	9	0	0	292	1	22	182	0	0	205	3408
9:00 AM	2	0	105	0	0	107	14	7	47	166	1	235	170	122	0	0	0	292	6	51	4	0	0	61	1	10	26	0	0	37	732
9:15 AM	0	0	123	0	0	123	18	6	32	167	1	224	179	97	0	0	0	276	5	30	6	0	0	41	0	8	21	0	0	29	693
Total	2	0	228	0	0	230	32	13	79	333	2	459	349	219	0	0	0	568	11	81	10	0	0	102	1	18	47	0	0	66	1425
Grand Total	5	7	1389	1	0	1402	206	124	709	2429	4	3472	2212	1324	0	0	0	3536	67	724	45	0	0	836	2	89	462	1	0	554	9800
Approach %	0.4	0.5	99.1	0.1	0.0		5.9	3.6	20.4	70.0	0.1		62.6	37.4	0.0	0.0	0.0		8.0	86.6	5.4	0.0	0.0		0.4	16.1	83.4	0.2	0.0		
Total %	0.1	0.1	14.2	0.0	0.0	14.3	2.1	1.3	7.2	24.8	0.0	35.4	22.6	13.5	0.0	0.0	0.0	36.1	0.7	7.4	0.5	0.0	0.0	8.5	0.0	0.9	4.7	0.0	0.0	5.7	
Exiting Leg Total	1576						3403						3974						718						129						9800
Cars	5	7	1318	1	0	1331	201	118	676	2370	4	3369	2117	1236	0	0	0	3353	66	696	45	0	0	807	2	88	448	1	0	539	9399
% Cars	100.0	100.0	94.9	100.0	0.0	94.9	97.6	95.2	95.3	97.6	100.0	97.0	95.7	93.4	0.0	0.0	0.0	94.8	98.5	96.1	100.0	0.0	0.0	96.5	100.0	98.9	97.0	100.0	0.0	97.3	95.9
Exiting Leg Total	1483						3266						3842						685						123						9399
Heavy Vehicles	0	0	62	0	0	62	3	0	9	44	0	56	82	76	0	0	0	158	0	15	0	0	0	15	0	0	3	0	0	3	294
% Heavy Vehicles	0.0	0.0	4.5	0.0	0.0	4.4	1.5	0.0	1.3	1.8	0.0	1.6	3.7	5.7	0.0	0.0	0.0	4.5	0.0	2.1	0.0	0.0	0.0	1.8	0.0	0.0	0.6	0.0	0.0	0.5	3.0
Exiting Leg Total	79						100						106						9						0						294
Buses	0	0	9	0	0	9	2	6	24	15	0	47	13	12	0	0	0	25	1	13	0	0	0	14	0	1	11	0	0	12	107
% Buses	0.0	0.0	0.6	0.0	0.0	0.6	1.0	4.8	3.4	0.6	0.0	1.4	0.6	0.9	0.0	0.0	0.0	0.7	1.5	1.8	0.0	0.0	0.0	1.7	0.0	1.1	2.4	0.0	0.0	2.2	1.1
Exiting Leg Total	14						37						26						24						6						107

**Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:**

7:15 AM	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
7:15 AM	0	1	141	0	0	142	21	10	85	212	0	328	217	102	0	0	0	319	5	67	8	0	0	80	0	7	49	0	0	56	925
7:30 AM	0	1	96	0	0	97	18	18	83	207	1	327	185	79	0	0	0	264	6	59	4	0	0	69	0	6	43	0	0	49	806
7:45 AM	0	1	101	0	0	102	27	15	74	226	0	342	197	153	0	0	0	350	5	69	8	0	0	82	0	4	47	0	0	51	927
8:00 AM	0	0	75	0	0	75	20	22	99	249	0	390	211	105	0	0	0	316	8	68	6	0	0	82	0	3	57	0	0	60	923
Total Volume	0	3	413	0	0	416	86	65	341	894	1	1387	810	439	0	0	0	1249	24	263	26	0	0	313	0	20	196	0	0	216	3581
% Approach Total	0.0	0.7	99.3	0.0	0.0		6.2	4.7	24.6	64.5	0.1		64.9	35.1	0.0	0.0	0.0		7.7	84.0	8.3	0.0	0.0		0.0	9.3	90.7	0.0	0.0		

PDI File #: **175607 (31)**  
 Location: **N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



**Cars, Heavy Vehicles, and Buses (Combined)**

		Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
		North						East						South						West						Northwest						
		Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
PHF		0.000	0.750	0.732	0.000	0.000	0.732	0.796	0.739	0.861	0.898	0.250	0.889	0.933	0.717	0.000	0.000	0.000	0.892	0.750	0.953	0.813	0.000	0.000	0.954	0.000	0.714	0.860	0.000	0.000	0.900	0.966
Cars		0	3	394	0	0	397	85	63	328	869	1	1346	776	422	0	0	0	1198	23	254	26	0	0	303	0	20	191	0	0	211	3455
Cars %		0.0	100.0	95.4	0.0	0.0	95.4	98.8	96.9	96.2	97.2	100.0	97.0	95.8	96.1	0.0	0.0	0.0	95.9	95.8	96.6	100.0	0.0	0.0	96.8	0.0	100.0	97.4	0.0	0.0	97.7	96.5
Heavy Vehicles		0	0	18	0	0	18	1	0	4	17	0	22	32	12	0	0	0	44	0	5	0	0	0	5	0	0	1	0	0	1	90
Heavy Vehicles %		0.0	0.0	4.4	0.0	0.0	4.3	1.2	0.0	1.2	1.9	0.0	1.6	4.0	2.7	0.0	0.0	0.0	3.5	0.0	1.9	0.0	0.0	0.0	1.6	0.0	0.0	0.5	0.0	0.0	0.5	2.5
Buses		0	0	1	0	0	1	0	2	9	8	0	19	2	5	0	0	0	7	1	4	0	0	0	5	0	0	4	0	0	4	36
Buses %		0.0	0.0	0.2	0.0	0.0	0.2	0.0	3.1	2.6	0.9	0.0	1.4	0.2	1.1	0.0	0.0	0.0	0.6	4.2	1.5	0.0	0.0	0.0	1.6	0.0	0.0	2.0	0.0	0.0	1.9	1.0
Cars Enter Leg		0	3	394	0	0	397	85	63	328	869	1	1346	776	422	0	0	0	1198	23	254	26	0	0	303	0	20	191	0	0	211	3455
Heavy Enter Leg		0	0	18	0	0	18	1	0	4	17	0	22	32	12	0	0	0	44	0	5	0	0	0	5	0	0	1	0	0	1	90
Bus Enter Leg		0	0	1	0	0	1	0	2	9	8	0	19	2	5	0	0	0	7	1	4	0	0	0	5	0	0	4	0	0	4	36
Total Entering Leg		0	3	413	0	0	416	86	65	341	894	1	1387	810	439	0	0	0	1249	24	263	26	0	0	313	0	20	196	0	0	216	3581
Cars Exiting Leg		533						1222						1306						331						63						
Heavy Exiting Leg		13						38						35						4						0						
Buses Exiting Leg		5						10						10						9						2						
Total Exiting Leg		551						1270						1351						344						65						

PDI File #: **175607 (31)**  
 Location: **N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**



**Cars**

	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
6:30 AM	1	1	118	0	0	120	9	6	32	232	1	280	131	76	0	0	0	207	5	59	0	0	0	64	0	7	30	0	0	37	708
6:45 AM	0	2	146	0	0	148	7	5	37	213	0	262	149	87	0	0	0	236	7	51	2	0	0	60	0	14	26	0	0	40	746
Total	1	3	264	0	0	268	16	11	69	445	1	542	280	163	0	0	0	443	12	110	2	0	0	124	0	21	56	0	0	77	1454
7:00 AM	0	0	142	1	0	143	11	6	50	190	0	257	145	92	0	0	0	237	4	75	4	0	0	83	0	10	34	1	0	45	765
7:15 AM	0	1	133	0	0	134	21	10	78	206	0	315	203	99	0	0	0	302	5	66	8	0	0	79	0	7	47	0	0	54	884
7:30 AM	0	1	93	0	0	94	18	17	80	199	1	315	180	77	0	0	0	257	5	56	4	0	0	65	0	6	41	0	0	47	778
7:45 AM	0	1	96	0	0	97	26	14	72	221	0	333	191	144	0	0	0	335	5	67	8	0	0	80	0	4	46	0	0	50	895
Total	0	3	464	1	0	468	76	47	280	816	1	1220	719	412	0	0	0	1131	19	264	24	0	0	307	0	27	168	1	0	196	3322
8:00 AM	0	0	72	0	0	72	20	22	98	243	0	383	202	102	0	0	0	304	8	65	6	0	0	79	0	3	57	0	0	60	898
8:15 AM	1	0	91	0	0	92	16	13	50	180	0	259	194	117	0	0	0	311	7	71	1	0	0	79	0	8	49	0	0	57	798
8:30 AM	0	0	95	0	0	95	24	9	58	184	0	275	208	122	0	0	0	330	2	66	2	0	0	70	0	7	48	0	0	55	825
8:45 AM	1	1	117	0	0	119	17	3	46	178	0	244	183	125	0	0	0	308	7	46	0	0	0	53	1	4	24	0	0	29	753
Total	2	1	375	0	0	378	77	47	252	785	0	1161	787	466	0	0	0	1253	24	248	9	0	0	281	1	22	178	0	0	201	3274
9:00 AM	2	0	98	0	0	100	14	7	45	163	1	230	160	106	0	0	0	266	6	49	4	0	0	59	1	10	25	0	0	36	691
9:15 AM	0	0	117	0	0	117	18	6	30	161	1	216	171	89	0	0	0	260	5	25	6	0	0	36	0	8	21	0	0	29	658
Total	2	0	215	0	0	217	32	13	75	324	2	446	331	195	0	0	0	526	11	74	10	0	0	95	1	18	46	0	0	65	1349
Grand Total	5	7	1318	1	0	1331	201	118	676	2370	4	3369	2117	1236	0	0	0	3353	66	696	45	0	0	807	2	88	448	1	0	539	9399
Approach %	0.4	0.5	99.0	0.1	0.0		6.0	3.5	20.1	70.3	0.1		63.1	36.9	0.0	0.0	0.0		8.2	86.2	5.6	0.0	0.0		0.4	16.3	83.1	0.2	0.0		
Total %	0.1	0.1	14.0	0.0	0.0	14.2	2.1	1.3	7.2	25.2	0.0	35.8	22.5	13.2	0.0	0.0	0.0	35.7	0.7	7.4	0.5	0.0	0.0	8.6	0.0	0.9	4.8	0.0	0.0	5.7	
Exiting Leg Total	1483						3266						3842						685						123						9399

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:15 AM	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
7:15 AM	0	1	133	0	0	134	21	10	78	206	0	315	203	99	0	0	0	302	5	66	8	0	0	79	0	7	47	0	0	54	884
7:30 AM	0	1	93	0	0	94	18	17	80	199	1	315	180	77	0	0	0	257	5	56	4	0	0	65	0	6	41	0	0	47	778
7:45 AM	0	1	96	0	0	97	26	14	72	221	0	333	191	144	0	0	0	335	5	67	8	0	0	80	0	4	46	0	0	50	895
8:00 AM	0	0	72	0	0	72	20	22	98	243	0	383	202	102	0	0	0	304	8	65	6	0	0	79	0	3	57	0	0	60	898
Total Volume	0	3	394	0	0	397	85	63	328	869	1	1346	776	422	0	0	0	1198	23	254	26	0	0	303	0	20	191	0	0	211	3455
% Approach Total	0.0	0.8	99.2	0.0	0.0		6.3	4.7	24.4	64.6	0.1		64.8	35.2	0.0	0.0	0.0		7.6	83.8	8.6	0.0	0.0		0.0	9.5	90.5	0.0	0.0		
PHF	0.000	0.750	0.741	0.000	0.000	0.741	0.817	0.716	0.837	0.894	0.250	0.879	0.956	0.733	0.000	0.000	0.000	0.894	0.719	0.948	0.813	0.000	0.000	0.947	0.000	0.714	0.838	0.000	0.000	0.879	0.962
Entering Leg	0	3	394	0	0	397	85	63	328	869	1	1346	776	422	0	0	0	1198	23	254	26	0	0	303	0	20	191	0	0	211	3455
Exiting Leg						533						1222						1306						331						63	3455
Total						930						2568						2504						634						274	6910

PDI File #: **175607 (31)**  
 Location: **N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
6:30 AM	0	0	9	0	0	9	0	0	0	4	0	4	4	6	0	0	0	10	0	1	0	0	0	1	0	0	0	0	0	0	24
6:45 AM	0	0	7	0	0	7	0	0	0	0	0	0	3	7	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	17
Total	0	0	16	0	0	16	0	0	0	4	0	4	7	13	0	0	0	20	0	1	0	0	0	1	0	0	0	0	0	0	41
7:00 AM	0	0	4	0	0	4	0	0	0	3	0	3	7	3	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	17
7:15 AM	0	0	7	0	0	7	0	0	2	3	0	5	14	3	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	29
7:30 AM	0	0	3	0	0	3	0	0	1	7	0	8	4	1	0	0	0	5	0	3	0	0	0	3	0	0	0	0	0	0	19
7:45 AM	0	0	5	0	0	5	1	0	1	2	0	4	5	6	0	0	0	11	0	1	0	0	0	1	0	0	1	0	0	1	22
Total	0	0	19	0	0	19	1	0	4	15	0	20	30	13	0	0	0	43	0	4	0	0	0	4	0	0	1	0	0	1	87
8:00 AM	0	0	3	0	0	3	0	0	0	5	0	5	9	2	0	0	0	11	0	1	0	0	0	1	0	0	0	0	0	0	20
8:15 AM	0	0	6	0	0	6	0	0	1	3	0	4	6	13	0	0	0	19	0	4	0	0	0	4	0	0	1	0	0	1	34
8:30 AM	0	0	4	0	0	4	2	0	1	4	0	7	6	7	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	24
8:45 AM	0	0	5	0	0	5	0	0	1	5	0	6	7	7	0	0	0	14	0	1	0	0	0	1	0	0	0	0	0	0	26
Total	0	0	18	0	0	18	2	0	3	17	0	22	28	29	0	0	0	57	0	6	0	0	0	6	0	0	1	0	0	1	104
9:00 AM	0	0	5	0	0	5	0	0	1	3	0	4	10	14	0	0	0	24	0	0	0	0	0	0	0	0	1	0	0	1	34
9:15 AM	0	0	4	0	0	4	0	0	1	5	0	6	7	7	0	0	0	14	0	4	0	0	0	4	0	0	0	0	0	0	28
Total	0	0	9	0	0	9	0	0	2	8	0	10	17	21	0	0	0	38	0	4	0	0	0	4	0	0	1	0	0	1	62
Grand Total	0	0	62	0	0	62	3	0	9	44	0	56	82	76	0	0	0	158	0	15	0	0	0	15	0	0	3	0	0	3	294
Approach %	0.0	0.0	100.0	0.0	0.0		5.4	0.0	16.1	78.6	0.0		51.9	48.1	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0		
Total %	0.0	0.0	21.1	0.0	0.0	21.1	1.0	0.0	3.1	15.0	0.0	19.0	27.9	25.9	0.0	0.0	0.0	53.7	0.0	5.1	0.0	0.0	0.0	5.1	0.0	0.0	1.0	0.0	0.0	1.0	
Exiting Leg Total	79						100						106						9						0						294

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:15 AM	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
8:15 AM	0	0	6	0	0	6	0	0	1	3	0	4	6	13	0	0	0	19	0	4	0	0	0	4	0	0	1	0	0	1	34
8:30 AM	0	0	4	0	0	4	2	0	1	4	0	7	6	7	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	24
8:45 AM	0	0	5	0	0	5	0	0	1	5	0	6	7	7	0	0	0	14	0	1	0	0	0	1	0	0	0	0	0	0	26
9:00 AM	0	0	5	0	0	5	0	0	1	3	0	4	10	14	0	0	0	24	0	0	0	0	0	0	0	0	0	1	0	0	34
Total Volume	0	0	20	0	0	20	2	0	4	15	0	21	29	41	0	0	0	70	0	5	0	0	0	5	0	0	2	0	0	2	118
% Approach Total	0.0	0.0	100.0	0.0	0.0		9.5	0.0	19.0	71.4	0.0		41.4	58.6	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.833	0.000	0.000	0.833	0.250	0.000	1.000	0.750	0.000	0.750	0.725	0.732	0.000	0.000	0.000	0.729	0.000	0.313	0.000	0.000	0.000	0.313	0.000	0.000	0.500	0.000	0.000	0.500	0.868
Entering Leg	0	0	20	0	0	20	2	0	4	15	0	21	29	41	0	0	0	70	0	5	0	0	0	5	0	0	2	0	0	2	118
Exiting Leg	43						36						35						4						0						118
Total	63						57						105						9						2						236



PDI File #: **175607 (31)**  
 Location: **N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Buses

	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
6:30 AM	0	0	0	0	0	0	0	0	2	1	0	3	2	1	0	0	0	3	0	1	0	0	0	1	0	1	0	0	0	1	8
6:45 AM	0	0	3	0	0	3	0	0	1	0	0	1	0	1	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	6
Total	0	0	3	0	0	3	0	0	3	1	0	4	2	2	0	0	0	4	0	2	0	0	0	2	0	1	0	0	0	1	14
7:00 AM	0	0	0	0	0	0	1	3	5	2	0	11	0	2	0	0	0	2	0	1	0	0	0	1	0	0	4	0	0	4	18
7:15 AM	0	0	1	0	0	1	0	0	5	3	0	8	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	0	0	2	12
7:30 AM	0	0	0	0	0	0	0	1	2	1	0	4	1	1	0	0	0	2	1	0	0	0	0	1	0	0	2	0	0	2	9
7:45 AM	0	0	0	0	0	0	0	1	1	3	0	5	1	3	0	0	0	4	0	1	0	0	0	1	0	0	0	0	0	0	10
Total	0	0	1	0	0	1	1	5	13	9	0	28	2	6	0	0	0	8	1	3	0	0	0	4	0	0	8	0	0	8	49
8:00 AM	0	0	0	0	0	0	0	0	1	1	0	2	0	1	0	0	0	1	0	2	0	0	0	2	0	0	0	0	0	0	5
8:15 AM	0	0	0	0	0	0	0	0	2	2	0	4	5	0	0	0	0	5	0	1	0	0	0	1	0	0	1	0	0	1	11
8:30 AM	0	0	0	0	0	0	1	0	2	1	0	4	3	0	0	0	0	3	0	1	0	0	0	1	0	0	1	0	0	1	9
8:45 AM	0	0	1	0	0	1	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	5
Total	0	0	1	0	0	1	1	1	6	4	0	12	8	1	0	0	0	9	0	5	0	0	0	5	0	0	3	0	0	3	30
9:00 AM	0	0	2	0	0	2	0	0	1	0	0	1	0	2	0	0	0	2	0	2	0	0	0	2	0	0	0	0	0	0	7
9:15 AM	0	0	2	0	0	2	0	0	1	1	0	2	1	1	0	0	0	2	0	1	0	0	0	1	0	0	0	0	0	0	7
Total	0	0	4	0	0	4	0	0	2	1	0	3	1	3	0	0	0	4	0	3	0	0	0	3	0	0	0	0	0	0	14
Grand Total	0	0	9	0	0	9	2	6	24	15	0	47	13	12	0	0	0	25	1	13	0	0	0	14	0	1	11	0	0	12	107
Approach %	0.0	0.0	100.0	0.0	0.0		4.3	12.8	51.1	31.9	0.0		52.0	48.0	0.0	0.0	0.0		7.1	92.9	0.0	0.0	0.0		0.0	8.3	91.7	0.0	0.0		
Total %	0.0	0.0	8.4	0.0	0.0	8.4	1.9	5.6	22.4	14.0	0.0	43.9	12.1	11.2	0.0	0.0	0.0	23.4	0.9	12.1	0.0	0.0	0.0	13.1	0.0	0.9	10.3	0.0	0.0	11.2	
Exiting Leg Total	14						37						26						24						6						107

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	1	3	5	2	0	11	0	2	0	0	0	2	0	1	0	0	0	1	0	0	4	0	0	4	18
7:15 AM	0	0	1	0	0	1	0	0	5	3	0	8	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	0	0	2	12
7:30 AM	0	0	0	0	0	0	0	1	2	1	0	4	1	1	0	0	0	2	1	0	0	0	0	1	0	0	2	0	0	2	9
7:45 AM	0	0	0	0	0	0	0	1	1	3	0	5	1	3	0	0	0	4	0	1	0	0	0	1	0	0	0	0	0	0	10
Total Volume	0	0	1	0	0	1	1	5	13	9	0	28	2	6	0	0	0	8	1	3	0	0	0	4	0	0	8	0	0	8	49
% Approach Total	0.0	0.0	100.0	0.0	0.0		3.6	17.9	46.4	32.1	0.0		25.0	75.0	0.0	0.0	0.0		25.0	75.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.250	0.000	0.000	0.250	0.250	0.417	0.650	0.750	0.000	0.636	0.500	0.500	0.000	0.000	0.000	0.500	0.250	0.750	0.000	0.000	0.000	1.000	0.000	0.000	0.500	0.000	0.000	0.500	0.681
Entering Leg	0	0	1	0	0	1	1	5	13	9	0	28	2	6	0	0	0	8	1	3	0	0	0	4	0	0	8	0	0	8	49
Exiting Leg						7						13						11					13						5	49	
Total						8						41						19					17						13	98	

PDI File #: 175607 (31)  
Location: N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street  
Location: E: Winthrop Avenue W: Winthrop Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume  
Site Code: 13796.00  
Count Date: Tuesday, May 09, 2017  
Start Time: 6:30 AM  
End Time: 9:30 AM  
Class:



Bicycles (on Roadway and Crosswalks)

	Revere Beach Parkway (Route 16)								Winthrop Avenue								Revere Beach Parkway (Route 16)								Winthrop Avenue								Harris Street								Total					
	North								East								South								West								Northwest													
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NB	CW-SWB	Total						
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:45 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	0	0	1	0	0	1	0	2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	2	3	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7
Approach %	0.0	0.0	50.0	0.0	0.0	50.0	0.0		0.0	0.0	100.0	0.0	0.0	0.0	0.0		33.3	0.0	0.0	0.0	0.0	0.0	66.7		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	14.3	0.0	0.0	14.3	0.0	28.6	0.0	0.0	14.3	0.0	0.0	0.0	0.0	14.3	14.3	0.0	0.0	0.0	0.0	0.0	28.6	42.9	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	1								1								4								1								0								7					

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:15 AM	Revere Beach Parkway (Route 16)								Winthrop Avenue								Revere Beach Parkway (Route 16)								Winthrop Avenue								Harris Street								Total		
	North								East								South								West								Northwest										
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NEB	CW-SWB	Total			
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
8:45 AM	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
Total Volume	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	
% Approach Total	0.0	0.0	50.0	0.0	0.0	50.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PHF	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500		
Entering Leg	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4		
Exiting Leg	1								0								0								0								0								0	4	
Total	3								0								4								1								0								8		

**Street**



**PRECISION  
DATA  
INDUSTRIES, LLC**

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

[illegible]

7:45 AM	Revere Beach Parkway (Route 16)								Winthrop Avenue								Revere Beach Parkway (Route 16)								Winthrop Avenue								Harris Street								Total
	North								East								South								West								Northwest								
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Hard Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Hard Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Hard Left	Hard Right	Hard Left	U-Turn	CW-NB	CW-SWB	Total	
7:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	8
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total Volume	0	0	0	0	0	1	4	5	0	0	0	0	0	0	1	1	0	0	0	0	0	2	5	7	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	15
% Approach Total	0.0	0.0	0.0	0.0	0.0	20.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	28.6	71.4	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.333	0.417	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.625	0.583	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.469
Entering Leg	0	0	0	0	0	1	4	5	0	0	0	0	0	0	1	1	0	0	0	0	0	2	5	7	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	15
Exiting Leg								5															7								2								0	15	
Total	10								2								14								4								0								30

PDI File #: **175607 (31)**  
 Location: **N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



**Cars, Heavy Vehicles, and Buses (Combined)**

	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
3:30 PM	3	5	142	0	1	151	21	23	89	212	0	345	234	192	0	0	0	426	6	41	2	0	0	49	0	3	38	2	0	43	1014
3:45 PM	1	3	92	0	0	96	15	18	91	179	0	303	262	229	0	0	0	491	3	52	7	0	0	62	1	5	34	0	0	40	992
Total	4	8	234	0	1	247	36	41	180	391	0	648	496	421	0	0	0	917	9	93	9	0	0	111	1	8	72	2	0	83	2006
4:00 PM	2	2	101	0	0	105	15	29	94	217	0	355	283	229	0	0	0	512	6	65	2	0	0	73	1	5	43	1	0	50	1095
4:15 PM	4	4	108	0	0	116	20	22	94	180	0	316	279	248	0	0	0	527	7	71	3	0	0	81	0	5	37	1	0	43	1083
4:30 PM	0	1	113	0	0	114	20	22	83	172	0	297	285	247	0	0	0	532	1	65	5	0	0	71	0	6	38	0	0	44	1058
4:45 PM	0	1	94	0	0	95	17	22	101	171	0	311	292	249	0	0	0	541	3	57	6	0	0	66	0	4	41	2	0	47	1060
Total	6	8	416	0	0	430	72	95	372	740	0	1279	1139	973	0	0	0	2112	17	258	16	0	0	291	1	20	159	4	0	184	4296
5:00 PM	0	2	115	0	0	117	21	26	111	208	0	366	331	261	0	0	0	592	1	51	6	1	0	59	0	1	33	0	0	34	1168
5:15 PM	1	4	119	0	0	124	15	31	97	172	0	315	264	248	1	0	0	513	4	56	3	0	0	63	2	5	28	0	0	35	1050
5:30 PM	3	2	102	0	0	107	19	20	114	183	0	336	273	260	1	0	0	534	4	63	1	0	0	68	0	8	30	0	0	38	1083
5:45 PM	2	2	122	0	0	126	22	31	95	197	0	345	253	217	0	0	0	470	2	45	11	0	0	58	0	5	33	0	0	38	1037
Total	6	10	458	0	0	474	77	108	417	760	0	1362	1121	986	2	0	0	2109	11	215	21	1	0	248	2	19	124	0	0	145	4338
6:00 PM	0	2	103	0	0	105	7	25	102	190	1	325	270	197	0	0	0	467	3	59	3	0	0	65	0	9	31	0	0	40	1002
6:15 PM	2	0	129	0	0	131	18	15	84	159	0	276	245	200	0	0	0	445	5	53	4	0	0	62	1	1	17	0	0	19	933
Total	2	2	232	0	0	236	25	40	186	349	1	601	515	397	0	0	0	912	8	112	7	0	0	127	1	10	48	0	0	59	1935
Grand Total	18	28	1340	0	1	1387	210	284	1155	2240	1	3890	3271	2777	2	0	0	6050	45	678	53	1	0	777	5	57	403	6	0	471	12575
Approach %	1.3	2.0	96.6	0.0	0.1		5.4	7.3	29.7	57.6	0.0		54.1	45.9	0.0	0.0	0.0		5.8	87.3	6.8	0.1	0.0		1.1	12.1	85.6	1.3	0.0		
Total %	0.1	0.2	10.7	0.0	0.0	11.0	1.7	2.3	9.2	17.8	0.0	30.9	26.0	22.1	0.0	0.0	0.0	48.1	0.4	5.4	0.4	0.0	0.0	6.2	0.0	0.5	3.2	0.0	0.0	3.7	
Exiting Leg Total	3047						4353						3682						1188						305						12575
Cars	18	27	1301	0	1	1347	208	279	1133	2217	1	3838	3202	2732	2	0	0	5936	45	664	53	1	0	763	5	55	397	6	0	463	12347
% Cars	100.0	96.4	97.1	0.0	100.0	97.1	99.0	98.2	98.1	99.0	100.0	98.7	97.9	98.4	100.0	0.0	0.0	98.1	100.0	97.9	100.0	100.0	0.0	98.2	100.0	96.5	98.5	100.0	0.0	98.3	98.2
Exiting Leg Total	3000						4264						3618						1165						300						12347
Heavy Vehicles	0	1	33	0	0	34	2	1	9	18	0	30	59	36	0	0	0	95	0	6	0	0	0	6	0	0	4	0	0	4	169
% Heavy Vehicles	0.0	3.6	2.5	0.0	0.0	2.5	1.0	0.4	0.8	0.8	0.0	0.8	1.8	1.3	0.0	0.0	0.0	1.6	0.0	0.9	0.0	0.0	0.0	0.8	0.0	0.0	1.0	0.0	0.0	0.8	1.3
Exiting Leg Total	38						69						51						10						1						169
Buses	0	0	6	0	0	6	0	4	13	5	0	22	10	9	0	0	0	19	0	8	0	0	0	8	0	2	2	0	0	4	59
% Buses	0.0	0.0	0.4	0.0	0.0	0.4	0.0	1.4	1.1	0.2	0.0	0.6	0.3	0.3	0.0	0.0	0.0	0.3	0.0	1.2	0.0	0.0	0.0	1.0	0.0	3.5	0.5	0.0	0.0	0.8	0.5
Exiting Leg Total	9						20						13						13						4						59

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:15 PM	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
4:15 PM	4	4	108	0	0	116	20	22	94	180	0	316	279	248	0	0	0	527	7	71	3	0	0	81	0	5	37	1	0	43	1083
4:30 PM	0	1	113	0	0	114	20	22	83	172	0	297	285	247	0	0	0	532	1	65	5	0	0	71	0	6	38	0	0	44	1058
4:45 PM	0	1	94	0	0	95	17	22	101	171	0	311	292	249	0	0	0	541	3	57	6	0	0	66	0	4	41	2	0	47	1060
5:00 PM	0	2	115	0	0	117	21	26	111	208	0	366	331	261	0	0	0	592	1	51	6	1	0	59	0	1	33	0	0	34	1168
Total Volume	4	8	430	0	0	442	78	92	389	731	0	1290	1187	1005	0	0	0	2192	12	244	20	1	0	277	0	16	149	3	0	168	4369
% Approach Total	0.9	1.8	97.3	0.0	0.0		6.0	7.1	30.2	56.7	0.0		54.2	45.8	0.0	0.0	0.0		4.3	88.1	7.2	0.4	0.0		0.0	9.5	88.7	1.8	0.0		

PDI File #: **175607 (31)**  
 Location: **N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



**Cars, Heavy Vehicles, and Buses (Combined)**

	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
PHF	0.250	0.500	0.935	0.000	0.000	0.944	0.929	0.885	0.876	0.879	0.000	0.881	0.897	0.963	0.000	0.000	0.000	0.926	0.429	0.859	0.833	0.250	0.000	0.855	0.000	0.667	0.909	0.375	0.000	0.894	0.935
Cars	4	7	420	0	0	431	77	90	385	726	0	1278	1167	988	0	0	0	2155	12	240	20	1	0	273	0	15	146	3	0	164	4301
Cars %	100.0	87.5	97.7	0.0	0.0	97.5	98.7	97.8	99.0	99.3	0.0	99.1	98.3	98.3	0.0	0.0	0.0	98.3	100.0	98.4	100.0	100.0	0.0	98.6	0.0	93.8	98.0	100.0	0.0	97.6	98.4
Heavy Vehicles	0	1	8	0	0	9	1	1	1	3	0	6	19	15	0	0	0	34	0	2	0	0	0	2	0	0	2	0	0	2	53
Heavy Vehicles %	0.0	12.5	1.9	0.0	0.0	2.0	1.3	1.1	0.3	0.4	0.0	0.5	1.6	1.5	0.0	0.0	0.0	1.6	0.0	0.8	0.0	0.0	0.0	0.7	0.0	0.0	1.3	0.0	0.0	1.2	1.2
Buses	0	0	2	0	0	2	0	1	3	2	0	6	1	2	0	0	0	3	0	2	0	0	0	2	0	1	1	0	0	2	15
Buses %	0.0	0.0	0.5	0.0	0.0	0.5	0.0	1.1	0.8	0.3	0.0	0.5	0.1	0.2	0.0	0.0	0.0	0.1	0.0	0.8	0.0	0.0	0.0	0.7	0.0	6.3	0.7	0.0	0.0	1.2	0.3
Cars Enter Leg	4	7	420	0	0	431	77	90	385	726	0	1278	1167	988	0	0	0	2155	12	240	20	1	0	273	0	15	146	3	0	164	4301
Heavy Enter Leg	0	1	8	0	0	9	1	1	1	3	0	6	19	15	0	0	0	34	0	2	0	0	0	2	0	0	2	0	0	2	53
Bus Enter Leg	0	0	2	0	0	2	0	1	3	2	0	6	1	2	0	0	0	3	0	2	0	0	0	2	0	1	1	0	0	2	15
Total Entering Leg	4	8	430	0	0	442	78	92	389	731	0	1290	1187	1005	0	0	0	2192	12	244	20	1	0	277	0	16	149	3	0	168	4369
Cars Exiting Leg	1088						1553						1173						392						95						4301
Heavy Exiting Leg	16						23						11						2						1						53
Buses Exiting Leg	2						4						5						3						1						15
Total Exiting Leg	1106						1580						1189						397						97						4369

PDI File #: **175607 (31)**  
 Location: **N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars

	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
3:30 PM	3	5	135	0	1	144	20	23	87	209	0	339	225	186	0	0	0	411	6	39	2	0	0	47	0	3	38	2	0	43	984
3:45 PM	1	3	89	0	0	93	15	18	88	177	0	298	251	222	0	0	0	473	3	51	7	0	0	61	1	5	34	0	0	40	965
Total	4	8	224	0	1	237	35	41	175	386	0	637	476	408	0	0	0	884	9	90	9	0	0	108	1	8	72	2	0	83	1949
4:00 PM	2	2	99	0	0	103	15	26	90	214	0	345	275	223	0	0	0	498	6	63	2	0	0	71	1	5	41	1	0	48	1065
4:15 PM	4	3	108	0	0	115	19	22	93	177	0	311	274	241	0	0	0	515	7	71	3	0	0	81	0	5	35	1	0	41	1063
4:30 PM	0	1	108	0	0	109	20	21	82	171	0	294	280	243	0	0	0	523	1	62	5	0	0	68	0	6	37	0	0	43	1037
4:45 PM	0	1	92	0	0	93	17	22	101	171	0	311	285	244	0	0	0	529	3	57	6	0	0	66	0	3	41	2	0	46	1045
Total	6	7	407	0	0	420	71	91	366	733	0	1261	1114	951	0	0	0	2065	17	253	16	0	0	286	1	19	154	4	0	178	4210
5:00 PM	0	2	112	0	0	114	21	25	109	207	0	362	328	260	0	0	0	588	1	50	6	1	0	58	0	1	33	0	0	34	1156
5:15 PM	1	4	116	0	0	121	15	31	96	171	0	313	262	247	1	0	0	510	4	55	3	0	0	62	2	5	28	0	0	35	1041
5:30 PM	3	2	98	0	0	103	19	20	110	183	0	332	273	256	1	0	0	530	4	62	1	0	0	67	0	7	30	0	0	37	1069
5:45 PM	2	2	115	0	0	119	22	31	95	193	0	341	246	215	0	0	0	461	2	43	11	0	0	56	0	5	33	0	0	38	1015
Total	6	10	441	0	0	457	77	107	410	754	0	1348	1109	978	2	0	0	2089	11	210	21	1	0	243	2	18	124	0	0	144	4281
6:00 PM	0	2	103	0	0	105	7	25	101	187	1	321	263	196	0	0	0	459	3	59	3	0	0	65	0	9	31	0	0	40	990
6:15 PM	2	0	126	0	0	128	18	15	81	157	0	271	240	199	0	0	0	439	5	52	4	0	0	61	1	1	16	0	0	18	917
Total	2	2	229	0	0	233	25	40	182	344	1	592	503	395	0	0	0	898	8	111	7	0	0	126	1	10	47	0	0	58	1907
Grand Total	18	27	1301	0	1	1347	208	279	1133	2217	1	3838	3202	2732	2	0	0	5936	45	664	53	1	0	763	5	55	397	6	0	463	12347
Approach %	1.3	2.0	96.6	0.0	0.1		5.4	7.3	29.5	57.8	0.0		53.9	46.0	0.0	0.0	0.0		5.9	87.0	6.9	0.1	0.0		1.1	11.9	85.7	1.3	0.0		
Total %	0.1	0.2	10.5	0.0	0.0	10.9	1.7	2.3	9.2	18.0	0.0	31.1	25.9	22.1	0.0	0.0	0.0	48.1	0.4	5.4	0.4	0.0	0.0	6.2	0.0	0.4	3.2	0.0	0.0	3.7	
Exiting Leg Total	3000						4264						3618						1165						300						12347

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
4:45 PM	0	1	92	0	0	93	17	22	101	171	0	311	285	244	0	0	0	529	3	57	6	0	0	66	0	3	41	2	0	46	1045
5:00 PM	0	2	112	0	0	114	21	25	109	207	0	362	328	260	0	0	0	588	1	50	6	1	0	58	0	1	33	0	0	34	1156
5:15 PM	1	4	116	0	0	121	15	31	96	171	0	313	262	247	1	0	0	510	4	55	3	0	0	62	2	5	28	0	0	35	1041
5:30 PM	3	2	98	0	0	103	19	20	110	183	0	332	273	256	1	0	0	530	4	62	1	0	0	67	0	7	30	0	0	37	1069
Total Volume	4	9	418	0	0	431	72	98	416	732	0	1318	1148	1007	2	0	0	2157	12	224	16	1	0	253	2	16	132	2	0	152	4311
% Approach Total	0.9	2.1	97.0	0.0	0.0		5.5	7.4	31.6	55.5	0.0		53.2	46.7	0.1	0.0	0.0		4.7	88.5	6.3	0.4	0.0		1.3	10.5	86.8	1.3	0.0		
PHF	0.333	0.563	0.901	0.000	0.000	0.890	0.857	0.790	0.945	0.884	0.000	0.910	0.875	0.968	0.500	0.000	0.000	0.917	0.750	0.903	0.667	0.250	0.000	0.944	0.250	0.571	0.805	0.250	0.000	0.826	0.932
Entering Leg	4	9	418	0	0	431	72	98	416	732	0	1318	1148	1007	2	0	0	2157	12	224	16	1	0	253	2	16	132	2	0	152	4311
Exiting Leg	1097						1504						1178						427						105						4311
Total	1528						2822						3335						680						257						8622

PDI File #: **175607 (31)**  
 Location: **N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
3:30 PM	0	0	6	0	0	6	1	0	1	2	0	4	7	6	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	23
3:45 PM	0	0	3	0	0	3	0	0	1	2	0	3	8	4	0	0	0	12	0	1	0	0	0	1	0	0	0	0	0	0	19
Total	0	0	9	0	0	9	1	0	2	4	0	7	15	10	0	0	0	25	0	1	0	0	0	1	0	0	0	0	0	0	42
4:00 PM	0	0	1	0	0	1	0	0	0	1	0	1	7	4	0	0	0	11	0	1	0	0	0	1	0	0	1	0	0	1	15
4:15 PM	0	1	0	0	0	1	1	0	0	2	0	3	5	6	0	0	0	11	0	0	0	0	0	0	0	0	1	0	0	1	16
4:30 PM	0	0	4	0	0	4	0	0	0	1	0	1	5	4	0	0	0	9	0	1	0	0	0	1	0	0	1	0	0	1	16
4:45 PM	0	0	2	0	0	2	0	0	0	0	0	0	6	4	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	12
Total	0	1	7	0	0	8	1	0	0	4	0	5	23	18	0	0	0	41	0	2	0	0	0	2	0	0	3	0	0	3	59
5:00 PM	0	0	2	0	0	2	0	1	1	0	0	2	3	1	0	0	0	4	0	1	0	0	0	1	0	0	0	0	0	0	9
5:15 PM	0	0	2	0	0	2	0	0	1	1	0	2	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
5:30 PM	0	0	4	0	0	4	0	0	2	0	0	2	0	2	0	0	0	2	0	1	0	0	0	1	0	0	0	0	0	0	9
5:45 PM	0	0	6	0	0	6	0	0	0	4	0	4	5	2	0	0	0	7	0	1	0	0	0	1	0	0	0	0	0	0	18
Total	0	0	14	0	0	14	0	1	4	5	0	10	10	6	0	0	0	16	0	3	0	0	0	3	0	0	0	0	0	0	43
6:00 PM	0	0	0	0	0	0	0	0	1	3	0	4	7	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	12
6:15 PM	0	0	3	0	0	3	0	0	2	2	0	4	4	1	0	0	0	5	0	0	0	0	0	0	0	0	1	0	0	1	13
Total	0	0	3	0	0	3	0	0	3	5	0	8	11	2	0	0	0	13	0	0	0	0	0	0	0	0	1	0	0	1	25
Grand Total	0	1	33	0	0	34	2	1	9	18	0	30	59	36	0	0	0	95	0	6	0	0	0	6	0	0	4	0	0	4	169
Approach %	0.0	2.9	97.1	0.0	0.0		6.7	3.3	30.0	60.0	0.0		62.1	37.9	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0		
Total %	0.0	0.6	19.5	0.0	0.0	20.1	1.2	0.6	5.3	10.7	0.0	17.8	34.9	21.3	0.0	0.0	0.0	56.2	0.0	3.6	0.0	0.0	0.0	3.6	0.0	0.0	2.4	0.0	0.0	2.4	
Exiting Leg Total	38						69						51						10						1						169

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street							
	North						East						South						West						Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total		Total
3:30 PM	0	0	6	0	0	6	1	0	1	2	0	4	7	6	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	23
3:45 PM	0	0	3	0	0	3	0	0	1	2	0	3	8	4	0	0	0	12	0	1	0	0	0	0	1	0	0	0	0	0	0	19
4:00 PM	0	0	1	0	0	1	0	0	0	1	0	1	7	4	0	0	0	11	0	1	0	0	0	0	1	0	0	1	0	0	0	15
4:15 PM	0	1	0	0	0	1	1	0	0	2	0	3	5	6	0	0	0	11	0	0	0	0	0	0	0	0	0	1	0	0	1	16
Total Volume	0	1	10	0	0	11	2	0	2	7	0	11	27	20	0	0	0	47	0	2	0	0	0	0	2	0	0	2	0	0	2	73
% Approach Total	0.0	9.1	90.9	0.0	0.0		18.2	0.0	18.2	63.6	0.0		57.4	42.6	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0			
PHF	0.000	0.250	0.417	0.000	0.000	0.458	0.500	0.000	0.500	0.875	0.000	0.688	0.844	0.833	0.000	0.000	0.000	0.904	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.500	0.793	
Entering Leg	0	1	10	0	0	11	2	0	2	7	0	11	27	20	0	0	0	47	0	2	0	0	0	2	0	0	2	0	0	2	73	
Exiting Leg						22						31						17						3							0	73
Total						33						42						64						5						2	146	

PDI File #: **175607 (31)**  
 Location: **N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street						Total
	North						East						South						West						Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
3:30 PM	0	0	1	0	0	1	0	0	1	1	0	2	2	0	0	0	0	2	0	2	0	0	0	2	0	0	0	0	0	0	7
3:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	3	3	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	8
Total	0	0	1	0	0	1	0	0	3	1	0	4	5	3	0	0	0	8	0	2	0	0	0	2	0	0	0	0	0	0	15
4:00 PM	0	0	1	0	0	1	0	3	4	2	0	9	1	2	0	0	0	3	0	1	0	0	0	1	0	0	1	0	0	1	15
4:15 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	4
4:30 PM	0	0	1	0	0	1	0	1	1	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	5
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	3
Total	0	0	2	0	0	2	0	4	6	3	0	13	2	4	0	0	0	6	0	3	0	0	0	3	0	1	2	0	0	3	27
5:00 PM	0	0	1	0	0	1	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	5
5:45 PM	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	0	0	2	0	1	0	0	0	1	0	0	0	0	0	0	4
Total	0	0	3	0	0	3	0	0	3	1	0	4	2	2	0	0	0	4	0	2	0	0	0	2	0	1	0	0	0	1	14
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	3
Total	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	3
Grand Total	0	0	6	0	0	6	0	4	13	5	0	22	10	9	0	0	0	19	0	8	0	0	0	8	0	2	2	0	0	4	59
Approach %	0.0	0.0	100.0	0.0	0.0		0.0	18.2	59.1	22.7	0.0		52.6	47.4	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	50.0	50.0	0.0	0.0		
Total %	0.0	0.0	10.2	0.0	0.0	10.2	0.0	6.8	22.0	8.5	0.0	37.3	16.9	15.3	0.0	0.0	0.0	32.2	0.0	13.6	0.0	0.0	0.0	13.6	0.0	3.4	3.4	0.0	0.0	6.8	
Exiting Leg Total	9						20						13						13						4						59

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Revere Beach Parkway (Route 16)						Winthrop Avenue						Revere Beach Parkway (Route 16)						Winthrop Avenue						Harris Street							
	North						East						South						West						Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total		Total
3:30 PM	0	0	1	0	0	1	0	0	1	1	0	2	2	0	0	0	0	0	2	0	2	0	0	0	2	0	0	0	0	0	0	7
3:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	3	3	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	8
4:00 PM	0	0	1	0	0	1	0	3	4	2	0	9	1	2	0	0	0	3	0	1	0	0	0	1	0	0	1	0	0	1	15	
4:15 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	4	
Total Volume	0	0	2	0	0	2	0	3	8	4	0	15	6	6	0	0	0	12	0	3	0	0	0	3	0	0	2	0	0	2	34	
% Approach Total	0.0	0.0	100.0	0.0	0.0		0.0	20.0	53.3	26.7	0.0		50.0	50.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0	0.0			
PHF	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.250	0.500	0.500	0.000	0.417	0.500	0.500	0.000	0.000	0.000	0.500	0.000	0.375	0.000	0.000	0.000	0.375	0.000	0.000	0.500	0.000	0.000	0.500	0.567	
Entering Leg	0	0	2	0	0	2	0	3	8	4	0	15	6	6	0	0	0	12	0	3	0	0	0	3	0	0	2	0	0	2	34	
Exiting Leg	6						11						6						8						3						34	
Total	8						26						18						11						5						68	



PDI File #: 175607 (31)  
Location: N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street  
Location: E: Winthrop Avenue W: Winthrop Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume  
Site Code: 13796.00  
Count Date: Tuesday, May 09, 2017  
Start Time: 3:30 PM  
End Time: 6:30 PM  
Class:



Bicycles (on Roadway and Crosswalks)

	Revere Beach Parkway (Route 16)									Winthrop Avenue									Revere Beach Parkway (Route 16)									Winthrop Avenue									Harris Street									Total
	North									East									South									West									Northwest									
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NB	CW-SWB	Total						
3:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2				
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Total	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:15 PM	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3			
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
Grand Total	0	0	0	0	0	1	1	2	0	2	0	0	0	0	0	0	2	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7				
Approach %	0.0	0.0	0.0	0.0	0.0	50.0	50.0		0.0	100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0							
Total %	0.0	0.0	0.0	0.0	0.0	14.3	14.3	28.6	0.0	28.6	0.0	0.0	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0	42.9	0.0	42.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
Exiting Leg Total	2									0									3									0									2									7

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Revere Beach Parkway (Route 16)								Winthrop Avenue								Revere Beach Parkway (Route 16)								Winthrop Avenue								Harris Street								Total
	North								East								South								West								Northwest								
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NEB	CW-SWB	Total	
3:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Approach Total	0.0	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Exiting Leg	1								0								1								0								0								2
Total	2								0								2								0								0								4

PDI File #: 175607 (31)  
Location: N: Revere Beach Parkway (Route 16) S: Revere Beach Parkway (Route 16) NW: Harris Street  
Location: E: Winthrop Avenue W: Winthrop Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume  
Site Code: 13796.00  
Count Date: Tuesday, May 09, 2017  
Start Time: 3:30 PM  
End Time: 6:30 PM  
Class:



Pedestrians

	Revere Beach Parkway (Route 16)								Winthrop Avenue								Revere Beach Parkway (Route 16)								Winthrop Avenue								Harris Street								Total
	North								East								South								West								Northwest								
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NEB	CW-SWB	Total	
3:30 PM	0	0	0	0	0	6	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
3:45 PM	0	0	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	7	
Total	0	0	0	0	0	7	4	11	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	14	
4:00 PM	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
4:15 PM	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6		
4:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1	4	
4:45 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Total	0	0	0	0	0	2	10	12	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1	19	
5:00 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4		
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2		
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	4	
5:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
Total	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5	0	0	0	0	0	0	0	1	1	0	0	0	1	1	2	11	
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	0	0	4	
Grand Total	0	0	0	0	0	10	16	26	0	0	0	0	0	0	0	1	1	0	0	0	0	7	7	14	0	0	0	0	0	2	2	4	0	0	0	0	0	2	1	3	48
Approach %	0.0	0.0	0.0	0.0	0.0	38.5	61.5		0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	0.0	66.7	33.3		
Total %	0.0	0.0	0.0	0.0	0.0	20.8	33.3	54.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	0.0	0.0	0.0	0.0	14.6	14.6	29.2	0.0	0.0	0.0	0.0	0.0	4.2	4.2	8.3	0.0	0.0	0.0	0.0	0.0	4.2	2.1	6.3	
Exiting Leg Total	26								1								14								4								3								48

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Revere Beach Parkway (Route 16)								Winthrop Avenue								Revere Beach Parkway (Route 16)								Winthrop Avenue								Harris Street								Total
	North								East								South								West								Northwest								
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NEB	CW-SWB	Total	
3:30 PM	0	0	0	0	0	6	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7		
3:45 PM	0	0	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	7		
4:00 PM	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5			
4:15 PM	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6			
Total Volume	0	0	0	0	0	8	12	20	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	1	1	0	0	0	0	0	0	25		
% Approach Total	0.0	0.0	0.0	0.0	0.0	40.0	60.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	75.0	25.0		0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.333	0.500	0.714	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.250	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.893		
Entering Leg	0	0	0	0	0	8	12	20	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	1	1	0	0	0	0	0	0	25		
Exiting Leg	20								0								4								1								0								
Total	40								0								8								2								0								50

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Cars, Heavy Vehicles, and Buses (Combined)

	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
6:30 AM	83	34	0	117	17	215	0	232	182	21	2	205	554
6:45 AM	64	44	0	108	14	209	1	224	186	34	0	220	552
Total	147	78	0	225	31	424	1	456	368	55	2	425	1106
7:00 AM	61	50	0	111	17	231	0	248	199	40	0	239	598
7:15 AM	82	42	0	124	21	238	0	259	254	75	1	330	713
7:30 AM	65	31	0	96	21	249	0	270	218	63	1	282	648
7:45 AM	53	27	0	80	21	316	0	337	219	65	3	287	704
Total	261	150	0	411	80	1034	0	1114	890	243	5	1138	2663
8:00 AM	76	25	0	101	22	272	0	294	203	74	1	278	673
8:15 AM	65	36	0	101	21	270	0	291	179	56	1	236	628
8:30 AM	54	29	0	83	21	211	0	232	238	39	0	277	592
8:45 AM	26	19	0	45	19	199	0	218	203	23	3	229	492
Total	221	109	0	330	83	952	0	1035	823	192	5	1020	2385
9:00 AM	31	13	0	44	12	164	0	176	164	27	1	192	412
9:15 AM	26	26	0	52	17	172	0	189	176	29	2	207	448
Total	57	39	0	96	29	336	0	365	340	56	3	399	860
Grand Total	686	376	0	1062	223	2746	1	2970	2421	546	15	2982	7014
Approach %	64.6	35.4	0.0		7.5	92.5	0.0		81.2	18.3	0.5		
Total %	9.8	5.4	0.0	15.1	3.2	39.2	0.0	42.3	34.5	7.8	0.2	42.5	
Exiting Leg Total	769				2798				3447				7014
Cars	671	358	0	1029	211	2666	1	2878	2343	527	13	2883	6790
% Cars	97.8	95.2	0.0	96.9	94.6	97.1	100.0	96.9	96.8	96.5	86.7	96.7	96.8
Exiting Leg Total	738				2702				3350				6790
Heavy Vehicles	9	10	0	19	5	44	0	49	55	11	2	68	136
% Heavy Vehicles	1.3	2.7	0.0	1.8	2.2	1.6	0.0	1.6	2.3	2.0	13.3	2.3	1.9
Exiting Leg Total	16				65				55				136
Buses	6	8	0	14	7	36	0	43	23	8	0	31	88
% Buses	0.9	2.1	0.0	1.3	3.1	1.3	0.0	1.4	1.0	1.5	0.0	1.0	1.3
Exiting Leg Total	15				31				42				88

### Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:15 AM	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:15 AM	82	42	0	124	21	238	0	259	254	75	1	330	713
7:30 AM	65	31	0	96	21	249	0	270	218	63	1	282	648
7:45 AM	53	27	0	80	21	316	0	337	219	65	3	287	704
8:00 AM	76	25	0	101	22	272	0	294	203	74	1	278	673
Total Volume	276	125	0	401	85	1075	0	1160	894	277	6	1177	2738
% Approach Total	68.8	31.2	0.0		7.3	92.7	0.0		76.0	23.5	0.5		
PHF	0.841	0.744	0.000	0.808	0.966	0.850	0.000	0.861	0.880	0.923	0.500	0.892	0.960
Cars	270	123	0	393	82	1046	0	1128	866	270	4	1140	2661
Cars %	97.8	98.4	0.0	98.0	96.5	97.3	0.0	97.2	96.9	97.5	66.7	96.9	97.2
Heavy Vehicles	5	2	0	7	1	15	0	16	20	4	2	26	49
Heavy Vehicles %	1.8	1.6	0.0	1.7	1.2	1.4	0.0	1.4	2.2	1.4	33.3	2.2	1.8
Buses	1	0	0	1	2	14	0	16	8	3	0	11	28
Buses %	0.4	0.0	0.0	0.2	2.4	1.3	0.0	1.4	0.9	1.1	0.0	0.9	1.0
Cars Enter Leg	270	123	0	393	82	1046	0	1128	866	270	4	1140	2661
Heavy Enter Leg	5	2	0	7	1	15	0	16	20	4	2	26	49
Bus Enter Leg	1	0	0	1	2	14	0	16	8	3	0	11	28
Total Entering Leg	276	125	0	401	85	1075	0	1160	894	277	6	1177	2738
Cars Exiting Leg				352				989				1320	2661

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

**Cars, Heavy Vehicles, and Buses (Combined)**

	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
Heavy Exiting Leg	5				22				22				49
Buses Exiting Leg	5				8				15				28
Total Exiting Leg	362				1019				1357				2738

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Cars

	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
6:30 AM	79	34	0	113	16	211	0	227	178	20	2	200	540
6:45 AM	63	40	0	103	13	208	1	222	182	33	0	215	540
Total	142	74	0	216	29	419	1	449	360	53	2	415	1080
7:00 AM	60	43	0	103	15	217	0	232	193	38	0	231	566
7:15 AM	82	41	0	123	19	230	0	249	246	72	1	319	691
7:30 AM	62	31	0	93	20	241	0	261	212	61	1	274	628
7:45 AM	52	26	0	78	21	308	0	329	216	65	2	283	690
Total	256	141	0	397	75	996	0	1071	867	236	4	1107	2575
8:00 AM	74	25	0	99	22	267	0	289	192	72	0	264	652
8:15 AM	64	35	0	99	20	263	0	283	173	53	1	227	609
8:30 AM	52	29	0	81	21	203	0	224	230	39	0	269	574
8:45 AM	26	19	0	45	18	193	0	211	197	21	3	221	477
Total	216	108	0	324	81	926	0	1007	792	185	4	981	2312
9:00 AM	31	13	0	44	10	160	0	170	154	26	1	181	395
9:15 AM	26	22	0	48	16	165	0	181	170	27	2	199	428
Total	57	35	0	92	26	325	0	351	324	53	3	380	823
Grand Total	671	358	0	1029	211	2666	1	2878	2343	527	13	2883	6790
Approach %	65.2	34.8	0.0		7.3	92.6	0.0		81.3	18.3	0.5		
Total %	9.9	5.3	0.0	15.2	3.1	39.3	0.0	42.4	34.5	7.8	0.2	42.5	
Exiting Leg Total	738				2702				3350				6790

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:15 AM	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:15 AM	82	41	0	123	19	230	0	249	246	72	1	319	691
7:30 AM	62	31	0	93	20	241	0	261	212	61	1	274	628
7:45 AM	52	26	0	78	21	308	0	329	216	65	2	283	690
8:00 AM	74	25	0	99	22	267	0	289	192	72	0	264	652
Total Volume	270	123	0	393	82	1046	0	1128	866	270	4	1140	2661
% Approach Total	68.7	31.3	0.0		7.3	92.7	0.0		76.0	23.7	0.4		
PHF	0.823	0.750	0.000	0.799	0.932	0.849	0.000	0.857	0.880	0.938	0.500	0.893	0.963
Entering Leg	270	123	0	393	82	1046	0	1128	866	270	4	1140	2661
Exiting Leg				352				989				1320	2661
Total				745				2117				2460	5322

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Heavy Vehicles

	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
6:30 AM	3	0	0	3	1	3	0	4	2	1	0	3	10
6:45 AM	1	3	0	4	0	0	0	0	3	0	0	3	7
Total	4	3	0	7	1	3	0	4	5	1	0	6	17
7:00 AM	0	1	0	1	0	3	0	3	4	0	0	4	8
7:15 AM	0	1	0	1	0	3	0	3	5	1	0	6	10
7:30 AM	3	0	0	3	1	6	0	7	5	1	0	6	16
7:45 AM	0	1	0	1	0	2	0	2	1	0	1	2	5
Total	3	3	0	6	1	14	0	15	15	2	1	18	39
8:00 AM	2	0	0	2	0	4	0	4	9	2	1	12	18
8:15 AM	0	0	0	0	0	6	0	6	4	1	0	5	11
8:30 AM	0	0	0	0	0	5	0	5	5	0	0	5	10
8:45 AM	0	0	0	0	1	4	0	5	4	2	0	6	11
Total	2	0	0	2	1	19	0	20	22	5	1	28	50
9:00 AM	0	0	0	0	1	3	0	4	7	1	0	8	12
9:15 AM	0	4	0	4	1	5	0	6	6	2	0	8	18
Total	0	4	0	4	2	8	0	10	13	3	0	16	30
Grand Total	9	10	0	19	5	44	0	49	55	11	2	68	136
Approach %	47.4	52.6	0.0		10.2	89.8	0.0		80.9	16.2	2.9		
Total %	6.6	7.4	0.0	14.0	3.7	32.4	0.0	36.0	40.4	8.1	1.5	50.0	
Exiting Leg Total	16				65				55				136

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
8:30 AM	0	0	0	0	0	5	0	5	5	0	0	5	10
8:45 AM	0	0	0	0	1	4	0	5	4	2	0	6	11
9:00 AM	0	0	0	0	1	3	0	4	7	1	0	8	12
9:15 AM	0	4	0	4	1	5	0	6	6	2	0	8	18
Total Volume	0	4	0	4	3	17	0	20	22	5	0	27	51
% Approach Total	0.0	100.0	0.0		15.0	85.0	0.0		81.5	18.5	0.0		
PHF	0.000	0.250	0.000	0.250	0.750	0.850	0.000	0.833	0.786	0.625	0.000	0.844	0.708
Entering Leg	0	4	0	4	3	17	0	20	22	5	0	27	51
Exiting Leg				8				26				17	51
Total				12				46				44	102

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Buses

	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
6:30 AM	1	0	0	1	0	1	0	1	2	0	0	2	4
6:45 AM	0	1	0	1	1	1	0	2	1	1	0	2	5
Total	1	1	0	2	1	2	0	3	3	1	0	4	9
7:00 AM	1	6	0	7	2	11	0	13	2	2	0	4	24
7:15 AM	0	0	0	0	2	5	0	7	3	2	0	5	12
7:30 AM	0	0	0	0	0	2	0	2	1	1	0	2	4
7:45 AM	1	0	0	1	0	6	0	6	2	0	0	2	9
Total	2	6	0	8	4	24	0	28	8	5	0	13	49
8:00 AM	0	0	0	0	0	1	0	1	2	0	0	2	3
8:15 AM	1	1	0	2	1	1	0	2	2	2	0	4	8
8:30 AM	2	0	0	2	0	3	0	3	3	0	0	3	8
8:45 AM	0	0	0	0	0	2	0	2	2	0	0	2	4
Total	3	1	0	4	1	7	0	8	9	2	0	11	23
9:00 AM	0	0	0	0	1	1	0	2	3	0	0	3	5
9:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	0	0	0	0	1	3	0	4	3	0	0	3	7
Grand Total	6	8	0	14	7	36	0	43	23	8	0	31	88
Approach %	42.9	57.1	0.0		16.3	83.7	0.0		74.2	25.8	0.0		
Total %	6.8	9.1	0.0	15.9	8.0	40.9	0.0	48.9	26.1	9.1	0.0	35.2	
Exiting Leg Total	15				31				42				88

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	1	6	0	7	2	11	0	13	2	2	0	4	24
7:15 AM	0	0	0	0	2	5	0	7	3	2	0	5	12
7:30 AM	0	0	0	0	0	2	0	2	1	1	0	2	4
7:45 AM	1	0	0	1	0	6	0	6	2	0	0	2	9
Total Volume	2	6	0	8	4	24	0	28	8	5	0	13	49
% Approach Total	25.0	75.0	0.0		14.3	85.7	0.0		61.5	38.5	0.0		
PHF	0.500	0.250	0.000	0.286	0.500	0.545	0.000	0.538	0.667	0.625	0.000	0.650	0.510
Entering Leg	2	6	0	8	4	24	0	28	8	5	0	13	49
Exiting Leg				9				14				26	49
Total				17				42				39	98

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Bicycles (on Roadway and Crosswalks)

	N. Shore Road						Winthrop Avenue (Route 145)						Winthrop Avenue (Route 145)						Total
	North						East						West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	2
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0	0	1	3	4
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		66.7	0.0	0.0	0.0	33.3		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	25.0	50.0	0.0	0.0	0.0	25.0	75.0	
Exiting Leg Total	0						2						2						4

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:45 AM	N. Shore Road						Winthrop Avenue (Route 145)						Winthrop Avenue (Route 145)						Total	
	North						East						West							
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	2
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.500
Entering Leg	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	2
Exiting Leg	0						1						1						1	2
Total	0						2						2						2	4



PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Pedestrians

	N. Shore Road						Winthrop Avenue (Route 145)						Winthrop Avenue (Route 145)						Total
	North						East						West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
6:45 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2	2	4
7:00 AM	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0	1	1	6
7:15 AM	0	0	0	11	0	11	0	0	0	0	0	0	0	0	0	4	0	4	15
7:30 AM	0	0	0	4	1	5	0	0	0	0	0	0	0	0	0	0	0	0	5
7:45 AM	0	0	0	4	4	8	0	0	0	0	0	0	0	0	0	0	1	1	9
Total	0	0	0	22	7	29	0	0	0	0	0	0	0	0	0	4	2	6	35
8:00 AM	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	4	2	6	9
8:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5
8:45 AM	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	1	0	1	6
Total	0	0	0	6	3	9	0	0	0	0	0	0	0	0	0	6	7	13	22
9:00 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	1	1	2	4
9:15 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	1	1	2	6
Grand Total	0	0	0	34	10	44	0	0	0	0	0	0	0	0	0	11	12	23	67
Approach %	0.0	0.0	0.0	77.3	22.7		0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	47.8	52.2	
Total %	0.0	0.0	0.0	50.7	14.9	65.7	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	16.4	17.9	34.3
Exiting Leg Total	44						0						23						67

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:15 AM	N. Shore Road						Winthrop Avenue (Route 145)						Winthrop Avenue (Route 145)						Total
	North						East						West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:15 AM	0	0	0	11	0	11	0	0	0	0	0	0	0	0	0	4	0	4	15
7:30 AM	0	0	0	4	1	5	0	0	0	0	0	0	0	0	0	0	0	0	5
7:45 AM	0	0	0	4	4	8	0	0	0	0	0	0	0	0	0	0	1	1	9
8:00 AM	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	4	2	6	9
Total Volume	0	0	0	21	6	27	0	0	0	0	0	0	0	0	0	8	3	11	38
% Approach Total	0.0	0.0	0.0	77.8	22.2		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.7	27.3		
PHF	0.000	0.000	0.000	0.477	0.375	0.614	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.375	0.458	0.633
Entering Leg	0	0	0	21	6	27	0	0	0	0	0	0	0	0	0	8	3	11	38
Exiting Leg						27						0						11	38
Total						54						0						22	76

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
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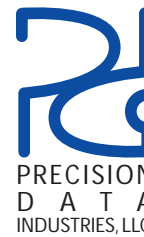
### Cars, Heavy Vehicles, and Buses (Combined)

	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
3:30 PM	52	18	0	70	49	227	0	276	253	50	1	304	650
3:45 PM	63	14	0	77	49	197	0	246	289	75	1	365	688
Total	115	32	0	147	98	424	0	522	542	125	2	669	1338
4:00 PM	98	35	0	133	26	228	0	254	299	66	3	368	755
4:15 PM	48	18	0	66	39	221	0	260	302	66	1	369	695
4:30 PM	62	31	0	93	46	186	0	232	266	72	1	339	664
4:45 PM	58	25	0	83	51	190	0	241	329	67	0	396	720
Total	266	109	0	375	162	825	0	987	1196	271	5	1472	2834
5:00 PM	63	24	0	87	38	246	0	284	329	67	0	396	767
5:15 PM	52	21	0	73	40	242	0	282	321	66	3	390	745
5:30 PM	56	28	0	84	51	247	0	298	291	62	1	354	736
5:45 PM	51	33	0	84	51	238	0	289	249	78	1	328	701
Total	222	106	0	328	180	973	0	1153	1190	273	5	1468	2949
6:00 PM	39	35	0	74	38	188	0	226	289	75	0	364	664
6:15 PM	45	31	0	76	54	152	0	206	241	59	2	302	584
Total	84	66	0	150	92	340	0	432	530	134	2	666	1248
Grand Total	687	313	0	1000	532	2562	0	3094	3458	803	14	4275	8369
Approach %	68.7	31.3	0.0		17.2	82.8	0.0		80.9	18.8	0.3		
Total %	8.2	3.7	0.0	11.9	6.4	30.6	0.0	37.0	41.3	9.6	0.2	51.1	
Exiting Leg Total	1335				3771				3263				8369
Cars	649	305	0	954	516	2515	0	3031	3418	787	14	4219	8204
% Cars	94.5	97.4	0.0	95.4	97.0	98.2	0.0	98.0	98.8	98.0	100.0	98.7	98.0
Exiting Leg Total	1303				3723				3178				8204
Heavy Vehicles	33	4	0	37	11	31	0	42	23	12	0	35	114
% Heavy Vehicles	4.8	1.3	0.0	3.7	2.1	1.2	0.0	1.4	0.7	1.5	0.0	0.8	1.4
Exiting Leg Total	23				27				64				114
Buses	5	4	0	9	5	16	0	21	17	4	0	21	51
% Buses	0.7	1.3	0.0	0.9	0.9	0.6	0.0	0.7	0.5	0.5	0.0	0.5	0.6
Exiting Leg Total	9				21				21				51

### Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:45 PM	58	25	0	83	51	190	0	241	329	67	0	396	720
5:00 PM	63	24	0	87	38	246	0	284	329	67	0	396	767
5:15 PM	52	21	0	73	40	242	0	282	321	66	3	390	745
5:30 PM	56	28	0	84	51	247	0	298	291	62	1	354	736
Total Volume	229	98	0	327	180	925	0	1105	1270	262	4	1536	2968
% Approach Total	70.0	30.0	0.0		16.3	83.7	0.0		82.7	17.1	0.3		
PHF	0.909	0.875	0.000	0.940	0.882	0.936	0.000	0.927	0.965	0.978	0.333	0.970	0.967
Cars	213	96	0	309	180	914	0	1094	1258	259	4	1521	2924
Cars %	93.0	98.0	0.0	94.5	100.0	98.8	0.0	99.0	99.1	98.9	100.0	99.0	98.5
Heavy Vehicles	16	1	0	17	0	8	0	8	9	2	0	11	36
Heavy Vehicles %	7.0	1.0	0.0	5.2	0.0	0.9	0.0	0.7	0.7	0.8	0.0	0.7	1.2
Buses	0	1	0	1	0	3	0	3	3	1	0	4	8
Buses %	0.0	1.0	0.0	0.3	0.0	0.3	0.0	0.3	0.2	0.4	0.0	0.3	0.3
Cars Enter Leg	213	96	0	309	180	914	0	1094	1258	259	4	1521	2924
Heavy Enter Leg	16	1	0	17	0	8	0	8	9	2	0	11	36
Bus Enter Leg	0	1	0	1	0	3	0	3	3	1	0	4	8
Total Entering Leg	229	98	0	327	180	925	0	1105	1270	262	4	1536	2968

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



46 Morton Street, Framingham, MA 01702  
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 Email: datarequests@pdillc.com

Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
	Cars Exiting Leg	439				1354				1131			
Heavy Exiting Leg	2				10				24				
Buses Exiting Leg	1				4				3				
Total Exiting Leg	442				1368				1158				

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



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### Cars

	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
3:30 PM	50	17	0	67	46	219	0	265	247	49	1	297	629
3:45 PM	58	13	0	71	47	194	0	241	285	69	1	355	667
Total	108	30	0	138	93	413	0	506	532	118	2	652	1296
4:00 PM	93	34	0	127	23	221	0	244	295	66	3	364	735
4:15 PM	47	17	0	64	37	216	0	253	297	63	1	361	678
4:30 PM	56	31	0	87	45	184	0	229	261	71	1	333	649
4:45 PM	54	25	0	79	51	187	0	238	325	66	0	391	708
Total	250	107	0	357	156	808	0	964	1178	266	5	1449	2770
5:00 PM	57	23	0	80	38	242	0	280	328	66	0	394	754
5:15 PM	48	21	0	69	40	240	0	280	318	65	3	386	735
5:30 PM	54	27	0	81	51	245	0	296	287	62	1	350	727
5:45 PM	49	33	0	82	48	232	0	280	247	77	1	325	687
Total	208	104	0	312	177	959	0	1136	1180	270	5	1455	2903
6:00 PM	39	34	0	73	37	186	0	223	289	75	0	364	660
6:15 PM	44	30	0	74	53	149	0	202	239	58	2	299	575
Total	83	64	0	147	90	335	0	425	528	133	2	663	1235
Grand Total	649	305	0	954	516	2515	0	3031	3418	787	14	4219	8204
Approach %	68.0	32.0	0.0		17.0	83.0	0.0		81.0	18.7	0.3		
Total %	7.9	3.7	0.0	11.6	6.3	30.7	0.0	36.9	41.7	9.6	0.2	51.4	
Exiting Leg Total	1303				3723				3178				8204

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:45 PM	54	25	0	79	51	187	0	238	325	66	0	391	708
5:00 PM	57	23	0	80	38	242	0	280	328	66	0	394	754
5:15 PM	48	21	0	69	40	240	0	280	318	65	3	386	735
5:30 PM	54	27	0	81	51	245	0	296	287	62	1	350	727
Total Volume	213	96	0	309	180	914	0	1094	1258	259	4	1521	2924
% Approach Total	68.9	31.1	0.0		16.5	83.5	0.0		82.7	17.0	0.3		
PHF	0.934	0.889	0.000	0.954	0.882	0.933	0.000	0.924	0.959	0.981	0.333	0.965	0.969
Entering Leg	213	96	0	309	180	914	0	1094	1258	259	4	1521	2924
Exiting Leg				439				1354				1131	2924
Total				748				2448				2652	5848

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Heavy Vehicles

	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
3:30 PM	2	0	0	2	1	3	0	4	1	1	0	2	8
3:45 PM	5	1	0	6	1	3	0	4	2	5	0	7	17
Total	7	1	0	8	2	6	0	8	3	6	0	9	25
4:00 PM	1	0	0	1	2	3	0	5	3	0	0	3	9
4:15 PM	1	0	0	1	1	3	0	4	4	2	0	6	11
4:30 PM	5	0	0	5	1	1	0	2	2	1	0	3	10
4:45 PM	4	0	0	4	0	3	0	3	4	0	0	4	11
Total	11	0	0	11	4	10	0	14	13	3	0	16	41
5:00 PM	6	1	0	7	0	2	0	2	1	1	0	2	11
5:15 PM	4	0	0	4	0	2	0	2	1	1	0	2	8
5:30 PM	2	0	0	2	0	1	0	1	3	0	0	3	6
5:45 PM	2	0	0	2	3	6	0	9	1	1	0	2	13
Total	14	1	0	15	3	11	0	14	6	3	0	9	38
6:00 PM	0	1	0	1	1	1	0	2	0	0	0	0	3
6:15 PM	1	1	0	2	1	3	0	4	1	0	0	1	7
Total	1	2	0	3	2	4	0	6	1	0	0	1	10
Grand Total	33	4	0	37	11	31	0	42	23	12	0	35	114
Approach %	89.2	10.8	0.0		26.2	73.8	0.0		65.7	34.3	0.0		
Total %	28.9	3.5	0.0	32.5	9.6	27.2	0.0	36.8	20.2	10.5	0.0	30.7	
Exiting Leg Total	23				27				64				114

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:45 PM	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
3:45 PM	5	1	0	6	1	3	0	4	2	5	0	7	17
4:00 PM	1	0	0	1	2	3	0	5	3	0	0	3	9
4:15 PM	1	0	0	1	1	3	0	4	4	2	0	6	11
4:30 PM	5	0	0	5	1	1	0	2	2	1	0	3	10
Total Volume	12	1	0	13	5	10	0	15	11	8	0	19	47
% Approach Total	92.3	7.7	0.0		33.3	66.7	0.0		57.9	42.1	0.0		
PHF	0.600	0.250	0.000	0.542	0.625	0.833	0.000	0.750	0.688	0.400	0.000	0.679	0.691
Entering Leg	12	1	0	13	5	10	0	15	11	8	0	19	47
Exiting Leg	13				12				22				47
Total	26				27				41				94

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Buses

	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
3:30 PM	0	1	0	1	2	5	0	7	5	0	0	5	13
3:45 PM	0	0	0	0	1	0	0	1	2	1	0	3	4
Total	0	1	0	1	3	5	0	8	7	1	0	8	17
4:00 PM	4	1	0	5	1	4	0	5	1	0	0	1	11
4:15 PM	0	1	0	1	1	2	0	3	1	1	0	2	6
4:30 PM	1	0	0	1	0	1	0	1	3	0	0	3	5
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	5	2	0	7	2	7	0	9	5	2	0	7	23
5:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	2	0	0	2	2
5:30 PM	0	1	0	1	0	1	0	1	1	0	0	1	3
5:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	1	0	1	0	3	0	3	4	0	0	4	8
6:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	1	1	0	2	2
Total	0	0	0	0	0	1	0	1	1	1	0	2	3
Grand Total	5	4	0	9	5	16	0	21	17	4	0	21	51
Approach %	55.6	44.4	0.0		23.8	76.2	0.0		81.0	19.0	0.0		
Total %	9.8	7.8	0.0	17.6	9.8	31.4	0.0	41.2	33.3	7.8	0.0	41.2	
Exiting Leg Total	9				21				21				51

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	N. Shore Road				Winthrop Avenue (Route 145)				Winthrop Avenue (Route 145)				Total
	North				East				West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
3:30 PM	0	1	0	1	2	5	0	7	5	0	0	5	13
3:45 PM	0	0	0	0	1	0	0	1	2	1	0	3	4
4:00 PM	4	1	0	5	1	4	0	5	1	0	0	1	11
4:15 PM	0	1	0	1	1	2	0	3	1	1	0	2	6
Total Volume	4	3	0	7	5	11	0	16	9	2	0	11	34
% Approach Total	57.1	42.9	0.0		31.3	68.8	0.0		81.8	18.2	0.0		
PHF	0.250	0.750	0.000	0.350	0.625	0.550	0.000	0.571	0.450	0.500	0.000	0.550	0.654
Entering Leg	4	3	0	7	5	11	0	16	9	2	0	11	34
Exiting Leg				7				12				15	34
Total				14				28				26	68

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Bicycles (on Roadway and Crosswalks)

	N. Shore Road						Winthrop Avenue (Route 145)						Winthrop Avenue (Route 145)						Total	
	North						East						West							
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	1	2
Approach %	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0		
Exiting Leg Total	1						1						0						2	

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	N. Shore Road						Winthrop Avenue (Route 145)						Winthrop Avenue (Route 145)						Total	
	North						East						West							
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.250
Entering Leg	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg	1						0						0						1	
Total	2						0						0						2	

PDI File #: **175607 38**  
 Location: **N: N. Shore Road**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Pedestrians

	N. Shore Road						Winthrop Avenue (Route 145)						Winthrop Avenue (Route 145)						Total
	North						East						West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	2	2	4	0	0	0	0	0	0	0	0	0	1	2	3	7
3:45 PM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	2	1	3	5
Total	0	0	0	3	3	6	0	0	0	0	0	0	0	0	0	3	3	6	12
4:00 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	5	5	7
4:15 PM	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	1	1	4
4:30 PM	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	1	1	2	7
4:45 PM	0	0	0	3	3	6	0	0	0	0	0	0	0	0	0	0	2	2	8
Total	0	0	0	4	12	16	0	0	0	0	0	0	0	0	0	1	9	10	26
5:00 PM	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	1	0	1	4
5:15 PM	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0	2	2	7
5:30 PM	0	0	0	1	7	8	0	0	0	0	0	0	0	0	0	2	0	2	10
5:45 PM	0	0	0	1	5	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	0	0	0	4	18	22	0	0	0	0	0	0	0	0	0	3	2	5	27
6:00 PM	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	1	0	1	4
6:15 PM	0	0	0	1	3	4	0	0	0	1	0	1	0	0	0	2	0	2	7
Total	0	0	0	3	4	7	0	0	0	1	0	1	0	0	0	3	0	3	11
Grand Total	0	0	0	14	37	51	0	0	0	1	0	1	0	0	0	10	14	24	76
Approach %	0.0	0.0	0.0	27.5	72.5		0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	41.7	58.3		
Total %	0.0	0.0	0.0	18.4	48.7	67.1	0.0	0.0	0.0	1.3	0.0	1.3	0.0	0.0	0.0	13.2	18.4	31.6	
Exiting Leg Total	51						1						24						76

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	N. Shore Road						Winthrop Avenue (Route 145)						Winthrop Avenue (Route 145)						Total
	North						East						West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:45 PM	0	0	0	3	3	6	0	0	0	0	0	0	0	0	0	0	2	2	8
5:00 PM	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	1	0	4
5:15 PM	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0	2	2	7
5:30 PM	0	0	0	1	7	8	0	0	0	0	0	0	0	0	0	0	2	0	10
Total Volume	0	0	0	6	16	22	0	0	0	0	0	0	0	0	0	3	4	7	29
% Approach Total	0.0	0.0	0.0	27.3	72.7		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	42.9	57.1		
PHF	0.000	0.000	0.000	0.500	0.571	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.500	0.875	0.725
Entering Leg	0	0	0	6	16	22	0	0	0	0	0	0	0	0	0	3	4	7	29
Exiting Leg						22						0						7	29
Total						44						0						14	58



PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class: **Cars, Heavy Vehicles, and Buses (Combined)**



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	1	0	0	0	1	2	233	48	0	283	9	0	5	0	14	42	174	0	0	216	514
6:45 AM	0	0	0	0	0	1	213	32	2	248	5	1	4	0	10	51	182	0	0	233	491
Total	1	0	0	0	1	3	446	80	2	531	14	1	9	0	24	93	356	0	0	449	1005
7:00 AM	0	0	0	0	0	1	253	43	2	299	11	1	4	0	16	45	204	1	0	250	565
7:15 AM	1	0	0	0	1	0	257	50	1	308	8	0	6	0	14	30	256	0	0	286	609
7:30 AM	1	0	0	0	1	0	262	40	0	302	9	0	15	0	24	43	220	0	0	263	590
7:45 AM	0	0	0	0	0	2	331	48	4	385	11	0	11	0	22	28	218	0	0	246	653
Total	2	0	0	0	2	3	1103	181	7	1294	39	1	36	0	76	146	898	1	0	1045	2417
8:00 AM	0	0	0	0	0	0	295	51	0	346	13	0	14	0	27	28	201	0	0	229	602
8:15 AM	0	0	0	0	0	0	272	42	0	314	20	0	14	0	34	29	184	0	0	213	561
8:30 AM	0	0	0	0	0	1	211	46	2	260	21	0	24	0	45	38	234	0	0	272	577
8:45 AM	0	0	0	0	0	0	201	26	1	228	27	0	15	0	42	32	191	0	0	223	493
Total	0	0	0	0	0	1	979	165	3	1148	81	0	67	0	148	127	810	0	0	937	2233
9:00 AM	1	0	0	0	1	1	172	18	1	192	32	0	15	0	47	27	153	1	0	181	421
9:15 AM	1	0	0	0	1	0	156	26	3	185	33	0	12	0	45	33	167	0	1	201	432
Total	2	0	0	0	2	1	328	44	4	377	65	0	27	0	92	60	320	1	1	382	853
Grand Total	5	0	0	0	5	8	2856	470	16	3350	199	2	139	0	340	426	2384	2	1	2813	6508
Approach %	100.0	0.0	0.0	0.0		0.2	85.3	14.0	0.5		58.5	0.6	40.9	0.0		15.1	84.7	0.1	0.0		
Total %	0.1	0.0	0.0	0.0	0.1	0.1	43.9	7.2	0.2	51.5	3.1	0.0	2.1	0.0	5.2	6.5	36.6	0.0	0.0	43.2	
Exiting Leg Total	12					2599					896					3001					6508
Cars	1	0	0	0	1	6	2774	466	16	3262	196	1	129	0	326	410	2303	0	1	2714	6303
% Cars	20.0	0.0	0.0	0.0	20.0	75.0	97.1	99.1	100.0	97.4	98.5	50.0	92.8	0.0	95.9	96.2	96.6	0.0	100.0	96.5	96.9
Exiting Leg Total	7					2515					876					2905					6303
Heavy Vehicles	4	0	0	0	4	2	41	1	0	44	2	1	9	0	12	14	54	2	0	70	130
% Heavy Vehicles	80.0	0.0	0.0	0.0	80.0	25.0	1.4	0.2	0.0	1.3	1.0	50.0	6.5	0.0	3.5	3.3	2.3	100.0	0.0	2.5	2.0
Exiting Leg Total	5					56					15					54					130
Buses	0	0	0	0	0	0	41	3	0	44	1	0	1	0	2	2	27	0	0	29	75
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.6	0.0	1.3	0.5	0.0	0.7	0.0	0.6	0.5	1.1	0.0	0.0	1.0	1.2
Exiting Leg Total	0					28					5					42					75

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:15 AM	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:15 AM	1	0	0	0	1	0	257	50	1	308	8	0	6	0	14	30	256	0	0	286	609
7:30 AM	1	0	0	0	1	0	262	40	0	302	9	0	15	0	24	43	220	0	0	263	590
7:45 AM	0	0	0	0	0	2	331	48	4	385	11	0	11	0	22	28	218	0	0	246	653
8:00 AM	0	0	0	0	0	0	295	51	0	346	13	0	14	0	27	28	201	0	0	229	602
Total Volume	2	0	0	0	2	2	1145	189	5	1341	41	0	46	0	87	129	895	0	0	1024	2454
% Approach Total	100.0	0.0	0.0	0.0		0.1	85.4	14.1	0.4		47.1	0.0	52.9	0.0		12.6	87.4	0.0	0.0		
PHF	0.500	0.000	0.000	0.000	0.500	0.250	0.865	0.926	0.313	0.871	0.788	0.000	0.767	0.000	0.806	0.750	0.874	0.000	0.000	0.895	0.940
Cars	0	0	0	0	0	2	1119	186	5	1312	41	0	41	0	82	124	866	0	0	990	2384
Cars %	0.0	0.0	0.0	0.0	0.0	100.0	97.7	98.4	100.0	97.8	100.0	0.0	89.1	0.0	94.3	96.1	96.8	0.0	0.0	96.7	97.1
Heavy Vehicles	2	0	0	0	2	0	11	1	0	12	0	0	5	0	5	4	22	0	0	26	45
Heavy Vehicles %	100.0	0.0	0.0	0.0	100.0	0.0	1.0	0.5	0.0	0.9	0.0	0.0	10.9	0.0	5.7	3.1	2.5	0.0	0.0	2.5	1.8
Buses	0	0	0	0	0	0	15	2	0	17	0	0	0	0	0	1	7	0	0	8	25
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.0	0.8	1.0
Cars Enter Leg	0	0	0	0	0	2	1119	186	5	1312	41	0	41	0	82	124	866	0	0	990	2384
Heavy Enter Leg	2	0	0	0	2	0	11	1	0	12	0	0	5	0	5	4	22	0	0	26	45
Bus Enter Leg	0	0	0	0	0	0	15	2	0	17	0	0	0	0	0	1	7	0	0	8	25
Total Entering Leg	2	0	0	0	2	2	1145	189	5	1341	41	0	46	0	87	129	895	0	0	1024	2454
Cars Exiting Leg	2					912					310					1160					2384

PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

**Cars, Heavy Vehicles, and Buses (Combined)**

	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
	Heavy Exiting Leg	0					22					5					18				
Buses Exiting Leg	0					7					3					15					
Total Exiting Leg	2					941					318					1193					2454

PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
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### Cars

	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	1	0	0	0	1	2	228	48	0	278	8	0	4	0	12	41	170	0	0	211	502
6:45 AM	0	0	0	0	0	1	211	32	2	246	5	0	4	0	9	48	178	0	0	226	481
Total	1	0	0	0	1	3	439	80	2	524	13	0	8	0	21	89	348	0	0	437	983
7:00 AM	0	0	0	0	0	1	236	43	2	282	11	1	4	0	16	45	192	0	0	237	535
7:15 AM	0	0	0	0	0	0	247	48	1	296	8	0	6	0	14	27	251	0	0	278	588
7:30 AM	0	0	0	0	0	0	258	40	0	298	9	0	11	0	20	42	212	0	0	254	572
7:45 AM	0	0	0	0	0	2	324	48	4	378	11	0	10	0	21	28	212	0	0	240	639
Total	0	0	0	0	0	3	1065	179	7	1254	39	1	31	0	71	142	867	0	0	1009	2334
8:00 AM	0	0	0	0	0	0	290	50	0	340	13	0	14	0	27	27	191	0	0	218	585
8:15 AM	0	0	0	0	0	0	266	42	0	308	19	0	13	0	32	28	178	0	0	206	546
8:30 AM	0	0	0	0	0	0	202	46	2	250	21	0	23	0	44	38	224	0	0	262	556
8:45 AM	0	0	0	0	0	0	194	26	1	221	26	0	15	0	41	32	185	0	0	217	479
Total	0	0	0	0	0	0	952	164	3	1119	79	0	65	0	144	125	778	0	0	903	2166
9:00 AM	0	0	0	0	0	0	168	18	1	187	32	0	14	0	46	25	148	0	0	173	406
9:15 AM	0	0	0	0	0	0	150	25	3	178	33	0	11	0	44	29	162	0	1	192	414
Total	0	0	0	0	0	0	318	43	4	365	65	0	25	0	90	54	310	0	1	365	820
Grand Total	1	0	0	0	1	6	2774	466	16	3262	196	1	129	0	326	410	2303	0	1	2714	6303
Approach %	100.0	0.0	0.0	0.0		0.2	85.0	14.3	0.5		60.1	0.3	39.6	0.0		15.1	84.9	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.1	44.0	7.4	0.3	51.8	3.1	0.0	2.0	0.0	5.2	6.5	36.5	0.0	0.0	43.1	
Exiting Leg Total	7					2515					876					2905					6303

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:15 AM	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:15 AM	0	0	0	0	0	0	247	48	1	296	8	0	6	0	14	27	251	0	0	278	588
7:30 AM	0	0	0	0	0	0	258	40	0	298	9	0	11	0	20	42	212	0	0	254	572
7:45 AM	0	0	0	0	0	2	324	48	4	378	11	0	10	0	21	28	212	0	0	240	639
8:00 AM	0	0	0	0	0	0	290	50	0	340	13	0	14	0	27	27	191	0	0	218	585
Total Volume	0	0	0	0	0	2	1119	186	5	1312	41	0	41	0	82	124	866	0	0	990	2384
% Approach Total	0.0	0.0	0.0	0.0		0.2	85.3	14.2	0.4		50.0	0.0	50.0	0.0		12.5	87.5	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.863	0.930	0.313	0.868	0.788	0.000	0.732	0.000	0.759	0.738	0.863	0.000	0.000	0.890	0.933
Entering Leg	0	0	0	0	0	2	1119	186	5	1312	41	0	41	0	82	124	866	0	0	990	2384
Exiting Leg	2					912					310					1160					2384
Total	2					2224					392					2150					4768

PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Heavy Vehicles

	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	1	2	0	0	3	8
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	3	0	0	5	6
Total	0	0	0	0	0	0	4	0	0	4	0	1	1	0	2	3	5	0	0	8	14
7:00 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	5	1	0	6	10
7:15 AM	1	0	0	0	1	0	3	1	0	4	0	0	0	0	0	3	4	0	0	7	12
7:30 AM	1	0	0	0	1	0	2	0	0	2	0	0	4	0	4	0	7	0	0	7	14
7:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	4	0	0	4	7
Total	2	0	0	0	2	0	11	1	0	12	0	0	5	0	5	3	20	1	0	24	43
8:00 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	1	7	0	0	8	12
8:15 AM	0	0	0	0	0	0	4	0	0	4	1	0	1	0	2	1	3	0	0	4	10
8:30 AM	0	0	0	0	0	1	6	0	0	7	0	0	1	0	1	0	7	0	0	7	15
8:45 AM	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	0	5	0	0	5	11
Total	0	0	0	0	0	1	19	0	0	20	2	0	2	0	4	2	22	0	0	24	48
9:00 AM	1	0	0	0	1	1	3	0	0	4	0	0	0	0	0	2	2	1	0	5	10
9:15 AM	1	0	0	0	1	0	4	0	0	4	0	0	1	0	1	4	5	0	0	9	15
Total	2	0	0	0	2	1	7	0	0	8	0	0	1	0	1	6	7	1	0	14	25
Grand Total	4	0	0	0	4	2	41	1	0	44	2	1	9	0	12	14	54	2	0	70	130
Approach %	100.0	0.0	0.0	0.0		4.5	93.2	2.3	0.0		16.7	8.3	75.0	0.0		20.0	77.1	2.9	0.0		
Total %	3.1	0.0	0.0	0.0	3.1	1.5	31.5	0.8	0.0	33.8	1.5	0.8	6.9	0.0	9.2	10.8	41.5	1.5	0.0	53.8	
Exiting Leg Total	5					56					15					54					130

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:30 AM	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:30 AM	0	0	0	0	0	1	6	0	0	7	0	0	1	0	1	0	7	0	0	7	15
8:45 AM	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	0	5	0	0	5	11
9:00 AM	1	0	0	0	1	1	3	0	0	4	0	0	0	0	0	2	2	1	0	5	10
9:15 AM	1	0	0	0	1	0	4	0	0	4	0	0	1	0	1	4	5	0	0	9	15
Total Volume	2	0	0	0	2	2	18	0	0	20	1	0	2	0	3	6	19	1	0	26	51
% Approach Total	100.0	0.0	0.0	0.0		10.0	90.0	0.0	0.0		33.3	0.0	66.7	0.0		23.1	73.1	3.8	0.0		
PHF	0.500	0.000	0.000	0.000	0.500	0.500	0.750	0.000	0.000	0.714	0.250	0.000	0.500	0.000	0.750	0.375	0.679	0.250	0.000	0.722	0.850
Entering Leg	2	0	0	0	2	2	18	0	0	20	1	0	2	0	3	6	19	1	0	26	51
Exiting Leg	3					20					6					22					51
Total	5					40					9					48					102

PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



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### Buses

	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:30 AM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	2	0	0	2	4
6:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	1	0	0	2	4
Total	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	1	3	0	0	4	8
7:00 AM	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	7	0	0	7	20
7:15 AM	0	0	0	0	0	0	7	1	0	8	0	0	0	0	0	0	1	0	0	1	9
7:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	1	0	0	2	4
7:45 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	7
Total	0	0	0	0	0	0	27	1	0	28	0	0	0	0	0	1	11	0	0	12	40
8:00 AM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	3	0	0	3	5
8:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	5
8:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	6
8:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
Total	0	0	0	0	0	0	8	1	0	9	0	0	0	0	0	0	10	0	0	10	19
9:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	3	0	0	3	5
9:15 AM	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	0	0	0	0	3	1	0	4	0	0	1	0	1	0	3	0	0	3	8
Grand Total	0	0	0	0	0	0	41	3	0	44	1	0	1	0	2	2	27	0	0	29	75
Approach %	0.0	0.0	0.0	0.0		0.0	93.2	6.8	0.0		50.0	0.0	50.0	0.0		6.9	93.1	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	54.7	4.0	0.0	58.7	1.3	0.0	1.3	0.0	2.7	2.7	36.0	0.0	0.0	38.7	
Exiting Leg Total	0					28					5					42					75

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	7	0	0	7	20
7:15 AM	0	0	0	0	0	0	7	1	0	8	0	0	0	0	0	0	1	0	0	1	9
7:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	1	0	0	4
7:45 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	2	0	0	7
Total Volume	0	0	0	0	0	0	27	1	0	28	0	0	0	0	0	0	1	11	0	0	40
% Approach Total	0.0	0.0	0.0	0.0		0.0	96.4	3.6	0.0		0.0	0.0	0.0	0.0			8.3	91.7	0.0	0.0	
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.519	0.250	0.000	0.538	0.000	0.000	0.000	0.000	0.000		0.250	0.393	0.000	0.000	0.429
Entering Leg	0	0	0	0	0	0	27	1	0	28	0	0	0	0	0		1	11	0	0	40
Exiting Leg	0					11					2					27					40
Total	0					39					2					39					80

PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Bicycles (on Roadway and Crosswalks)

	Parking Lot							Winthrop Avenue (Route 145)							Tomasello Drive							Winthrop Avenue (Route 145)							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0		
Exiting Leg Total	0							0							0							2							2

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:30 AM	Parking Lot							Winthrop Avenue (Route 145)							Tomasello Drive							Winthrop Avenue (Route 145)							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	
Entering Leg	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg	0							0							0							1							1
Total	0							1							0							1							2

PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Pedestrians

	Parking Lot							Winthrop Avenue (Route 145)							Tomasello Drive							Winthrop Avenue (Route 145)							Total		
	North							East							South							West									
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total			
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	3	
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5	0	0	0	0	0	4	4	9	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	8	0	0	0	0	0	4	4	12	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	12	0	0	0	0	0	0	2	2	14
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	5	0	0	0	0	3	2	5	10	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	3	1	4	8	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	7	0	0	0	0	0	2	2	9	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	16	28	0	0	0	0	6	7	13	41	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	1	3	4	8	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	0	0	0	0	0	1	1	7	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	7	0	0	0	0	0	0	0	7	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	7	0	0	0	0	2	2	4	11	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	15	24	0	0	0	0	3	6	9	33	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	5	0	0	0	0	0	2	2	7	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	0	0	0	0	2	4	6	10	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	9	0	0	0	0	2	6	8	17	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	43	69	0	0	0	0	11	23	34	103	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	37.7	62.3		0.0	0.0	0.0	0.0	32.4	67.6				
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.2	41.7	67.0	0.0	0.0	0.0	0.0	10.7	22.3	33.0			
Exiting Leg Total	0							0							69							34							103		

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:45 AM	Parking Lot							Winthrop Avenue (Route 145)							Tomasello Drive							Winthrop Avenue (Route 145)							Total	
	North							East							South							West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5	0	0	0	0	0	4	4	9
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	12	0	0	0	0	0	2	2	14
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	5	0	0	0	0	3	2	5	10
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	3	1	4	8
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	14	26	0	0	0	0	6	9	15	41
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	46.2	53.8		0.0	0.0	0.0	0.0	40.0	60.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.583	0.542	0.000	0.000	0.000	0.000	0.500	0.563	0.750	0.732	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	14	26	0	0	0	0	6	9	15	41	
Exiting Leg	0							0							26							15							41	
Total	0							0							52							30							82	

PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class: **Cars, Heavy Vehicles, and Buses (Combined)**



	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	0	0	0	0	0	230	34	1	265	95	0	47	0	142	40	226	0	0	266	673
3:45 PM	1	1	0	0	2	0	201	33	0	234	93	0	43	0	136	41	273	0	0	314	686
Total	1	1	0	0	2	0	431	67	1	499	188	0	90	0	278	81	499	0	0	580	1359
4:00 PM	0	0	0	0	0	0	219	33	2	254	105	0	40	0	145	57	275	0	0	332	731
4:15 PM	4	0	1	0	5	0	213	38	4	255	100	0	45	0	145	56	259	0	0	315	720
4:30 PM	1	0	0	0	1	0	203	24	1	228	94	0	47	0	141	56	268	0	0	324	694
4:45 PM	0	0	0	0	0	0	182	37	2	221	113	0	56	0	169	60	294	0	0	354	744
Total	5	0	1	0	6	0	817	132	9	958	412	0	188	0	600	229	1096	0	0	1325	2889
5:00 PM	0	0	0	0	0	0	249	36	0	285	122	0	57	0	179	47	326	0	0	373	837
5:15 PM	0	0	0	0	0	0	224	34	0	258	125	0	59	0	184	53	276	0	0	329	771
5:30 PM	0	0	0	0	0	0	227	41	1	269	89	0	66	0	155	55	267	0	0	322	746
5:45 PM	0	0	0	0	0	0	214	39	1	254	102	0	67	0	169	53	250	0	0	303	726
Total	0	0	0	0	0	0	914	150	2	1066	438	0	249	0	687	208	1119	0	0	1327	3080
6:00 PM	0	0	0	0	0	0	184	34	0	218	97	0	46	1	144	67	259	0	0	326	688
6:15 PM	0	0	0	0	0	0	148	48	2	198	79	0	64	0	143	56	208	0	0	264	605
Total	0	0	0	0	0	0	332	82	2	416	176	0	110	1	287	123	467	0	0	590	1293
Grand Total	6	1	1	0	8	0	2494	431	14	2939	1214	0	637	1	1852	641	3181	0	0	3822	8621
Approach %	75.0	12.5	12.5	0.0		0.0	84.9	14.7	0.5		65.6	0.0	34.4	0.1		16.8	83.2	0.0	0.0		
Total %	0.1	0.0	0.0	0.0	0.1	0.0	28.9	5.0	0.2	34.1	14.1	0.0	7.4	0.0	21.5	7.4	36.9	0.0	0.0	44.3	
Exiting Leg Total	0					4410					1074					3137					8621
Cars	5	1	1	0	7	0	2448	430	14	2892	1209	0	621	1	1831	629	3141	0	0	3770	8500
% Cars	83.3	100.0	100.0	0.0	87.5	0.0	98.2	99.8	100.0	98.4	99.6	0.0	97.5	100.0	98.9	98.1	98.7	0.0	0.0	98.6	98.6
Exiting Leg Total	0					4365					1061					3074					8500
Heavy Vehicles	1	0	0	0	1	0	30	1	0	31	4	0	11	0	15	8	25	0	0	33	80
% Heavy Vehicles	16.7	0.0	0.0	0.0	12.5	0.0	1.2	0.2	0.0	1.1	0.3	0.0	1.7	0.0	0.8	1.2	0.8	0.0	0.0	0.9	0.9
Exiting Leg Total	0					29					9					42					80
Buses	0	0	0	0	0	0	16	0	0	16	1	0	5	0	6	4	15	0	0	19	41
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.5	0.1	0.0	0.8	0.0	0.3	0.6	0.5	0.0	0.0	0.5	0.5
Exiting Leg Total	0					16					4					21					41

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:45 PM	0	0	0	0	0	0	182	37	2	221	113	0	56	0	169	60	294	0	0	354	744
5:00 PM	0	0	0	0	0	0	249	36	0	285	122	0	57	0	179	47	326	0	0	373	837
5:15 PM	0	0	0	0	0	0	224	34	0	258	125	0	59	0	184	53	276	0	0	329	771
5:30 PM	0	0	0	0	0	0	227	41	1	269	89	0	66	0	155	55	267	0	0	322	746
Total Volume	0	0	0	0	0	0	882	148	3	1033	449	0	238	0	687	215	1163	0	0	1378	3098
% Approach Total	0.0	0.0	0.0	0.0		0.0	85.4	14.3	0.3		65.4	0.0	34.6	0.0		15.6	84.4	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.886	0.902	0.375	0.906	0.898	0.000	0.902	0.000	0.933	0.896	0.892	0.000	0.000	0.924	0.925
Cars	0	0	0	0	0	0	874	148	3	1025	446	0	235	0	681	213	1151	0	0	1364	3070
Cars %	0.0	0.0	0.0	0.0	0.0	0.0	99.1	100.0	100.0	99.2	99.3	0.0	98.7	0.0	99.1	99.1	99.0	0.0	0.0	99.0	99.1
Heavy Vehicles	0	0	0	0	0	0	5	0	0	5	2	0	3	0	5	1	10	0	0	11	21
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.5	0.4	0.0	1.3	0.0	0.7	0.5	0.9	0.0	0.0	0.8	0.7
Buses	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	1	2	0	0	3	7
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.1	0.5	0.2	0.0	0.0	0.2	0.2
Cars Enter Leg	0	0	0	0	0	0	874	148	3	1025	446	0	235	0	681	213	1151	0	0	1364	3070
Heavy Enter Leg	0	0	0	0	0	0	5	0	0	5	2	0	3	0	5	1	10	0	0	11	21
Bus Enter Leg	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	1	2	0	0	3	7
Total Entering Leg	0	0	0	0	0	0	882	148	3	1033	449	0	238	0	687	215	1163	0	0	1378	3098



PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

**Cars, Heavy Vehicles, and Buses (Combined)**

Cars Exiting Leg Heavy Exiting Leg Buses Exiting Leg Total Exiting Leg	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
	0					1600					361					1109					
	0					12					1					8					
	0					3					1					3					
	0					1615					363					1120					

PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
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### Cars

	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	0	0	0	0	0	223	34	1	258	95	0	44	0	139	39	220	0	0	259	656
3:45 PM	1	1	0	0	2	0	198	33	0	231	93	0	41	0	134	41	267	0	0	308	675
Total	1	1	0	0	2	0	421	67	1	489	188	0	85	0	273	80	487	0	0	567	1331
4:00 PM	0	0	0	0	0	0	210	33	2	245	104	0	40	0	144	56	270	0	0	326	715
4:15 PM	3	0	1	0	4	0	209	37	4	250	99	0	44	0	143	54	256	0	0	310	707
4:30 PM	1	0	0	0	1	0	199	24	1	224	94	0	46	0	140	55	263	0	0	318	683
4:45 PM	0	0	0	0	0	0	180	37	2	219	111	0	55	0	166	59	291	0	0	350	735
Total	4	0	1	0	5	0	798	131	9	938	408	0	185	0	593	224	1080	0	0	1304	2840
5:00 PM	0	0	0	0	0	0	246	36	0	282	121	0	56	0	177	47	323	0	0	370	829
5:15 PM	0	0	0	0	0	0	223	34	0	257	125	0	58	0	183	53	273	0	0	326	766
5:30 PM	0	0	0	0	0	0	225	41	1	267	89	0	66	0	155	54	264	0	0	318	740
5:45 PM	0	0	0	0	0	0	207	39	1	247	102	0	64	0	166	50	250	0	0	300	713
Total	0	0	0	0	0	0	901	150	2	1053	437	0	244	0	681	204	1110	0	0	1314	3048
6:00 PM	0	0	0	0	0	0	182	34	0	216	97	0	45	1	143	66	258	0	0	324	683
6:15 PM	0	0	0	0	0	0	146	48	2	196	79	0	62	0	141	55	206	0	0	261	598
Total	0	0	0	0	0	0	328	82	2	412	176	0	107	1	284	121	464	0	0	585	1281
Grand Total	5	1	1	0	7	0	2448	430	14	2892	1209	0	621	1	1831	629	3141	0	0	3770	8500
Approach %	71.4	14.3	14.3	0.0		0.0	84.6	14.9	0.5		66.0	0.0	33.9	0.1		16.7	83.3	0.0	0.0		
Total %	0.1	0.0	0.0	0.0	0.1	0.0	28.8	5.1	0.2	34.0	14.2	0.0	7.3	0.0	21.5	7.4	37.0	0.0	0.0	44.4	
Exiting Leg Total	0					4365					1061					3074					8500

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:45 PM	0	0	0	0	0	0	180	37	2	219	111	0	55	0	166	59	291	0	0	350	735
5:00 PM	0	0	0	0	0	0	246	36	0	282	121	0	56	0	177	47	323	0	0	370	829
5:15 PM	0	0	0	0	0	0	223	34	0	257	125	0	58	0	183	53	273	0	0	326	766
5:30 PM	0	0	0	0	0	0	225	41	1	267	89	0	66	0	155	54	264	0	0	318	740
Total Volume	0	0	0	0	0	0	874	148	3	1025	446	0	235	0	681	213	1151	0	0	1364	3070
% Approach Total	0.0	0.0	0.0	0.0		0.0	85.3	14.4	0.3		65.5	0.0	34.5	0.0		15.6	84.4	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.888	0.902	0.375	0.909	0.892	0.000	0.890	0.000	0.930	0.903	0.891	0.000	0.000	0.922	0.926
Entering Leg	0	0	0	0	0	0	874	148	3	1025	446	0	235	0	681	213	1151	0	0	1364	3070
Exiting Leg	0					1600					361					1109					3070
Total	0					2625					1042					2473					6140

PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
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### Heavy Vehicles

	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	0	2	0	0	2	6
3:45 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	6
Total	0	0	0	0	0	0	6	0	0	6	0	0	1	0	1	0	5	0	0	5	12
4:00 PM	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	0	4	0	0	4	9
4:15 PM	1	0	0	0	1	0	2	1	0	3	1	0	0	0	1	1	2	0	0	3	8
4:30 PM	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	1	3	0	0	4	8
4:45 PM	0	0	0	0	0	0	2	0	0	2	1	0	1	0	2	1	3	0	0	4	8
Total	1	0	0	0	1	0	11	1	0	12	3	0	2	0	5	3	12	0	0	15	33
5:00 PM	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	0	3	0	0	3	6
5:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	3
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4
5:45 PM	0	0	0	0	0	0	7	0	0	7	0	0	3	0	3	3	0	0	0	3	13
Total	0	0	0	0	0	0	10	0	0	10	1	0	5	0	6	3	7	0	0	10	26
6:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	1	0	0	0	1	3
6:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	2	0	2	1	1	0	0	2	6
Total	0	0	0	0	0	0	3	0	0	3	0	0	3	0	3	2	1	0	0	3	9
Grand Total	1	0	0	0	1	0	30	1	0	31	4	0	11	0	15	8	25	0	0	33	80
Approach %	100.0	0.0	0.0	0.0		0.0	96.8	3.2	0.0		26.7	0.0	73.3	0.0		24.2	75.8	0.0	0.0		
Total %	1.3	0.0	0.0	0.0	1.3	0.0	37.5	1.3	0.0	38.8	5.0	0.0	13.8	0.0	18.8	10.0	31.3	0.0	0.0	41.3	
Exiting Leg Total	0					29					9					42					80

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:00 PM	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	0	4	0	0	4	9
4:15 PM	1	0	0	0	1	0	2	1	0	3	1	0	0	0	1	1	2	0	0	3	8
4:30 PM	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	1	3	0	0	4	8
4:45 PM	0	0	0	0	0	0	2	0	0	2	1	0	1	0	2	1	3	0	0	4	8
Total Volume	1	0	0	0	1	0	11	1	0	12	3	0	2	0	5	3	12	0	0	15	33
% Approach Total	100.0	0.0	0.0	0.0		0.0	91.7	8.3	0.0		60.0	0.0	40.0	0.0		20.0	80.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.000	0.688	0.250	0.000	0.750	0.750	0.000	0.500	0.000	0.625	0.750	0.750	0.000	0.000	0.938	0.917
Entering Leg	1	0	0	0	1	0	11	1	0	12	3	0	2	0	5	3	12	0	0	15	33
Exiting Leg	0					15					4					14					33
Total	1					27					9					29					66

PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
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 Class:



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### Buses

	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	0	0	0	0	0	4	0	0	4	0	0	2	0	2	1	4	0	0	5	11
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	3	0	0	3	5
Total	0	0	0	0	0	0	4	0	0	4	0	0	4	0	4	1	7	0	0	8	16
4:00 PM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	1	1	0	0	2	7
4:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	1	1	0	0	2	5
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	8	0	0	8	1	0	1	0	2	2	4	0	0	6	16
5:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	1	2	0	0	3	6
6:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
Grand Total	0	0	0	0	0	0	16	0	0	16	1	0	5	0	6	4	15	0	0	19	41
Approach %	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		16.7	0.0	83.3	0.0		21.1	78.9	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	39.0	0.0	0.0	39.0	2.4	0.0	12.2	0.0	14.6	9.8	36.6	0.0	0.0	46.3	
Exiting Leg Total	0					16					4					21					41

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Parking Lot					Winthrop Avenue (Route 145)					Tomasello Drive					Winthrop Avenue (Route 145)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
3:30 PM	0	0	0	0	0	0	4	0	0	4	0	0	2	0	2	1	4	0	0	5	11
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	3	0	0	3	5
4:00 PM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	1	1	0	0	2	7
4:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	1	1	0	0	2	5
Total Volume	0	0	0	0	0	0	11	0	0	11	0	0	5	0	5	3	9	0	0	12	28
% Approach Total	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		25.0	75.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.550	0.000	0.000	0.550	0.000	0.000	0.625	0.000	0.625	0.750	0.563	0.000	0.000	0.600	0.636
Entering Leg	0	0	0	0	0	0	11	0	0	11	0	0	5	0	5	3	9	0	0	12	28
Exiting Leg	0					9					3					16					28
Total	0					20					8					28					56

PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
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### Bicycles (on Roadway and Crosswalks)

	Parking Lot							Winthrop Avenue (Route 145)							Tomasello Drive							Winthrop Avenue (Route 145)							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	1	1	2	4
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	50.0	50.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	25.0	25.0	50.0	
Exiting Leg Total	0							0							2							2							4

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

5:00 PM	Parking Lot							Winthrop Avenue (Route 145)							Tomasello Drive							Winthrop Avenue (Route 145)							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	2
Exiting Leg	0							0							2							0							2
Total	0							0							4							0							4

PDI File #: **175607 (39)**  
 Location: **N: Parking Lot S: Tomasello Drive**  
 Location: **E: Winthrop Avenue (Route 145) W: Winthrop Avenue (Route 145)**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Pedestrians

	Parking Lot							Winthrop Avenue (Route 145)							Tomasello Drive							Winthrop Avenue (Route 145)							Total	
	North							East							South							West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	8	0	0	0	0	2	3	5	13
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	4	2	6	8	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2	10	0	0	0	0	6	5	11	21	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	8	0	0	0	0	6	2	8	16	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3	3	4	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	9	17	0	0	0	0	1	1	2	19	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	0	3	5	8	13	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	15	31	0	0	0	0	10	11	21	52	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	3	10	0	0	0	0	1	4	5	15	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	4	9	0	0	0	0	2	0	2	11	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	8	0	0	0	0	2	3	5	13	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	3	10	0	0	0	0	7	8	15	25	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	15	37	0	0	0	0	12	15	27	64	
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1	11	0	0	0	0	2	0	2	13	
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	2	13	0	0	0	0	3	0	3	16	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	3	24	0	0	0	0	5	0	5	29	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	35	102	0	0	0	0	33	31	64	166	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	65.7	34.3		0.0	0.0	0.0	0.0	51.6	48.4			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.4	21.1	61.4	0.0	0.0	0.0	0.0	19.9	18.7	38.6		
Exiting Leg Total	0							0							102							64							166	

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

5:30 PM	Parking Lot							Winthrop Avenue (Route 145)							Tomasello Drive							Winthrop Avenue (Route 145)							Total	
	North							East							South							West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	8	0	0	0	0	2	3	5	13
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	3	10	0	0	0	0	7	8	15	25
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1	11	0	0	0	0	2	0	2	13
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	2	13	0	0	0	0	3	0	3	16
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	11	42	0	0	0	0	14	11	25	67
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	73.8	26.2		0.0	0.0	0.0	0.0	56.0	44.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.705	0.550	0.808	0.000	0.000	0.000	0.000	0.500	0.344	0.417	0.670	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	11	42	0	0	0	0	14	11	25	67
Exiting Leg	0							0							42							25							67	
Total	0							0							84							50							134	

PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Cars, Heavy Vehicles, and Buses (Combined)

	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	235	0	0	235	33	31	0	64	0	31	0	31	330
6:45 AM	217	0	0	217	23	33	0	56	0	32	0	32	305
Total	452	0	0	452	56	64	0	120	0	63	0	63	635
7:00 AM	256	0	0	256	67	36	0	103	0	66	0	66	425
7:15 AM	277	0	0	277	78	23	0	101	0	60	0	60	438
7:30 AM	294	0	0	294	47	31	0	78	0	56	0	56	428
7:45 AM	221	0	0	221	48	57	0	105	0	53	1	54	380
Total	1048	0	0	1048	240	147	0	387	0	235	1	236	1671
8:00 AM	246	0	0	246	59	61	0	120	0	43	0	43	409
8:15 AM	219	0	2	221	57	44	0	101	0	46	0	46	368
8:30 AM	209	0	0	209	45	31	0	76	0	42	0	42	327
8:45 AM	186	0	0	186	27	24	0	51	0	65	0	65	302
Total	860	0	2	862	188	160	0	348	0	196	0	196	1406
9:00 AM	156	0	2	158	35	16	0	51	0	51	0	51	260
9:15 AM	143	0	0	143	32	18	0	50	0	60	0	60	253
Total	299	0	2	301	67	34	0	101	0	111	0	111	513
Grand Total	2659	0	4	2663	551	405	0	956	0	605	1	606	4225
Approach %	99.8	0.0	0.2		57.6	42.4	0.0		0.0	99.8	0.2		
Total %	62.9	0.0	0.1	63.0	13.0	9.6	0.0	22.6	0.0	14.3	0.0	14.3	
Exiting Leg Total	1160				0				3065				4225
Cars	2617	0	3	2620	536	404	0	940	0	580	1	581	4141
% Cars	98.4	0.0	75.0	98.4	97.3	99.8	0.0	98.3	0.0	95.9	100.0	95.9	98.0
Exiting Leg Total	1119				0				3022				4141
Heavy Vehicles	21	0	1	22	8	1	0	9	0	14	0	14	45
% Heavy Vehicles	0.8	0.0	25.0	0.8	1.5	0.2	0.0	0.9	0.0	2.3	0.0	2.3	1.1
Exiting Leg Total	23				0				22				45
Buses	21	0	0	21	7	0	0	7	0	11	0	11	39
% Buses	0.8	0.0	0.0	0.8	1.3	0.0	0.0	0.7	0.0	1.8	0.0	1.8	0.9
Exiting Leg Total	18				0				21				39

### Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	256	0	0	256	67	36	0	103	0	66	0	66	425
7:15 AM	277	0	0	277	78	23	0	101	0	60	0	60	438
7:30 AM	294	0	0	294	47	31	0	78	0	56	0	56	428
7:45 AM	221	0	0	221	48	57	0	105	0	53	1	54	380
Total Volume	1048	0	0	1048	240	147	0	387	0	235	1	236	1671
% Approach Total	100.0	0.0	0.0		62.0	38.0	0.0		0.0	99.6	0.4		
PHF	0.891	0.000	0.000	0.891	0.769	0.645	0.000	0.921	0.000	0.890	0.250	0.894	0.954
Cars	1028	0	0	1028	231	146	0	377	0	224	1	225	1630
Cars %	98.1	0.0	0.0	98.1	96.3	99.3	0.0	97.4	0.0	95.3	100.0	95.3	97.5
Heavy Vehicles	5	0	0	5	4	1	0	5	0	3	0	3	13
Heavy Vehicles %	0.5	0.0	0.0	0.5	1.7	0.7	0.0	1.3	0.0	1.3	0.0	1.3	0.8
Buses	15	0	0	15	5	0	0	5	0	8	0	8	28
Buses %	1.4	0.0	0.0	1.4	2.1	0.0	0.0	1.3	0.0	3.4	0.0	3.4	1.7
Cars Enter Leg	1028	0	0	1028	231	146	0	377	0	224	1	225	1630
Heavy Enter Leg	5	0	0	5	4	1	0	5	0	3	0	3	13
Bus Enter Leg	15	0	0	15	5	0	0	5	0	8	0	8	28
Total Entering Leg	1048	0	0	1048	240	147	0	387	0	235	1	236	1671
Cars Exiting Leg				455				0				1175	1630

PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

**Cars, Heavy Vehicles, and Buses (Combined)**

	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Heavy Exiting Leg	7				0				6				13
Buses Exiting Leg	13				0				15				28
Total Exiting Leg	475				0				1196				1671



PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Cars

	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	233	0	0	233	32	31	0	63	0	30	0	30	326
6:45 AM	214	0	0	214	23	33	0	56	0	32	0	32	302
Total	447	0	0	447	55	64	0	119	0	62	0	62	628
7:00 AM	249	0	0	249	64	36	0	100	0	59	0	59	408
7:15 AM	272	0	0	272	75	23	0	98	0	58	0	58	428
7:30 AM	290	0	0	290	47	31	0	78	0	56	0	56	424
7:45 AM	217	0	0	217	45	56	0	101	0	51	1	52	370
Total	1028	0	0	1028	231	146	0	377	0	224	1	225	1630
8:00 AM	242	0	0	242	59	61	0	120	0	43	0	43	405
8:15 AM	218	0	2	220	54	44	0	98	0	43	0	43	361
8:30 AM	204	0	0	204	44	31	0	75	0	41	0	41	320
8:45 AM	184	0	0	184	27	24	0	51	0	61	0	61	296
Total	848	0	2	850	184	160	0	344	0	188	0	188	1382
9:00 AM	155	0	1	156	34	16	0	50	0	48	0	48	254
9:15 AM	139	0	0	139	32	18	0	50	0	58	0	58	247
Total	294	0	1	295	66	34	0	100	0	106	0	106	501
Grand Total	2617	0	3	2620	536	404	0	940	0	580	1	581	4141
Approach %	99.9	0.0	0.1		57.0	43.0	0.0		0.0	99.8	0.2		
Total %	63.2	0.0	0.1	63.3	12.9	9.8	0.0	22.7	0.0	14.0	0.0	14.0	
Exiting Leg Total	1119				0				3022				4141

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	249	0	0	249	64	36	0	100	0	59	0	59	408
7:15 AM	272	0	0	272	75	23	0	98	0	58	0	58	428
7:30 AM	290	0	0	290	47	31	0	78	0	56	0	56	424
7:45 AM	217	0	0	217	45	56	0	101	0	51	1	52	370
Total Volume	1028	0	0	1028	231	146	0	377	0	224	1	225	1630
% Approach Total	100.0	0.0	0.0		61.3	38.7	0.0		0.0	99.6	0.4		
PHF	0.886	0.000	0.000	0.886	0.770	0.652	0.000	0.933	0.000	0.949	0.250	0.953	0.952
Entering Leg	1028	0	0	1028	231	146	0	377	0	224	1	225	1630
Exiting Leg				455				0				1175	1630
Total				1483				377				1400	3260

PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Heavy Vehicles

	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
6:45 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total	3	0	0	3	0	0	0	0	0	1	0	1	4
7:00 AM	2	0	0	2	1	0	0	1	0	2	0	2	5
7:15 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
7:30 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
7:45 AM	1	0	0	1	1	1	0	2	0	1	0	1	4
Total	5	0	0	5	4	1	0	5	0	3	0	3	13
8:00 AM	3	0	0	3	0	0	0	0	0	0	0	0	3
8:15 AM	1	0	0	1	2	0	0	2	0	3	0	3	6
8:30 AM	4	0	0	4	1	0	0	1	0	1	0	1	6
8:45 AM	1	0	0	1	0	0	0	0	0	3	0	3	4
Total	9	0	0	9	3	0	0	3	0	7	0	7	19
9:00 AM	0	0	1	1	1	0	0	1	0	3	0	3	5
9:15 AM	4	0	0	4	0	0	0	0	0	0	0	0	4
Total	4	0	1	5	1	0	0	1	0	3	0	3	9
Grand Total	21	0	1	22	8	1	0	9	0	14	0	14	45
Approach %	95.5	0.0	4.5		88.9	11.1	0.0		0.0	100.0	0.0		
Total %	46.7	0.0	2.2	48.9	17.8	2.2	0.0	20.0	0.0	31.1	0.0	31.1	
Exiting Leg Total	23				0				22				45

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:15 AM	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
8:15 AM	1	0	0	1	2	0	0	2	0	3	0	3	6
8:30 AM	4	0	0	4	1	0	0	1	0	1	0	1	6
8:45 AM	1	0	0	1	0	0	0	0	0	3	0	3	4
9:00 AM	0	0	1	1	1	0	0	1	0	3	0	3	5
Total Volume	6	0	1	7	4	0	0	4	0	10	0	10	21
% Approach Total	85.7	0.0	14.3		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.375	0.000	0.250	0.438	0.500	0.000	0.000	0.500	0.000	0.833	0.000	0.833	0.875
Entering Leg	6	0	1	7	4	0	0	4	0	10	0	10	21
Exiting Leg				15				0				6	21
Total				22				4				16	42

PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Buses

	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:30 AM	1	0	0	1	1	0	0	1	0	0	0	0	2
6:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	2	0	0	2	1	0	0	1	0	0	0	0	3
7:00 AM	5	0	0	5	2	0	0	2	0	5	0	5	12
7:15 AM	5	0	0	5	1	0	0	1	0	2	0	2	8
7:30 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
7:45 AM	3	0	0	3	2	0	0	2	0	1	0	1	6
Total	15	0	0	15	5	0	0	5	0	8	0	8	28
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
8:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	3	0	0	3	1	0	0	1	0	1	0	1	5
9:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	1	0	0	1	0	0	0	0	0	2	0	2	3
Grand Total	21	0	0	21	7	0	0	7	0	11	0	11	39
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
Total %	53.8	0.0	0.0	53.8	17.9	0.0	0.0	17.9	0.0	28.2	0.0	28.2	
Exiting Leg Total	18				0				21				39

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	5	0	0	5	2	0	0	2	0	5	0	5	12
7:15 AM	5	0	0	5	1	0	0	1	0	2	0	2	8
7:30 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
7:45 AM	3	0	0	3	2	0	0	2	0	1	0	1	6
Total Volume	15	0	0	15	5	0	0	5	0	8	0	8	28
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.750	0.000	0.000	0.750	0.625	0.000	0.000	0.625	0.000	0.400	0.000	0.400	0.583
Entering Leg	15	0	0	15	5	0	0	5	0	8	0	8	28
Exiting Leg				13				0				15	28
Total				28				5				23	56

PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Bicycles (on Roadway and Crosswalks)

	Bennington Street						Crescent Avenue						Bennington Street						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	1	0	0	0	0	1	1	2	0	0	1	0	3	1	0	0	0	0	0	4
Approach %	100.0	0.0	0.0	0.0	0.0			66.7	0.0	0.0	33.3	0.0			0.0	0.0	0.0	0.0	0.0	
Total %	25.0	0.0	0.0	0.0	0.0	25.0		50.0	0.0	0.0	25.0	0.0	75.0		0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	2						1						1						4	

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

6:45 AM	Bennington Street						Crescent Avenue						Bennington Street						Total		
	North						East						South								
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total			
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	2
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000		0.500	0.000	0.000	0.000	0.000	0.500		0.000	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	0	0	0	0	0	0		2	0	0	0	0	2		0	0	0	0	0	0	2
Exiting Leg	2						0						0						2		
Total	2						2						0						4		

PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Pedestrians

	Bennington Street						Crescent Avenue						Bennington Street						Total
	North						East						South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	
6:30 AM	0	0	0	0	14	14	0	0	0	1	0	1	0	0	0	0	0	0	15
6:45 AM	0	0	0	0	7	7	0	0	0	16	0	16	0	0	0	0	0	0	23
Total	0	0	0	0	21	21	0	0	0	17	0	17	0	0	0	0	0	0	38
7:00 AM	0	0	0	0	1	1	0	0	0	17	2	19	0	0	0	0	0	0	20
7:15 AM	0	0	0	0	1	1	0	0	0	3	2	5	0	0	0	0	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	0	1	1	6
7:45 AM	0	0	0	0	0	0	0	0	0	21	2	23	0	0	0	0	0	0	23
Total	0	0	0	0	2	2	0	0	0	44	8	52	0	0	0	0	1	1	55
8:00 AM	0	0	0	0	0	0	0	0	0	44	7	51	0	0	0	0	0	0	51
8:15 AM	0	0	0	0	0	0	0	0	0	20	6	26	0	0	0	0	0	0	26
8:30 AM	0	0	0	1	1	2	0	0	0	4	2	6	0	0	0	0	0	0	8
8:45 AM	0	0	0	0	1	1	0	0	0	1	1	2	0	0	0	0	0	0	3
Total	0	0	0	1	2	3	0	0	0	69	16	85	0	0	0	0	0	0	88
9:00 AM	0	0	0	1	3	4	0	0	0	0	1	1	0	0	0	1	0	1	6
9:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	2	3	5	0	0	0	0	1	1	0	0	0	1	0	1	7
Grand Total	0	0	0	3	28	31	0	0	0	130	25	155	0	0	0	1	1	2	188
Approach %	0.0	0.0	0.0	9.7	90.3		0.0	0.0	0.0	83.9	16.1		0.0	0.0	0.0	50.0	50.0		
Total %	0.0	0.0	0.0	1.6	14.9	16.5	0.0	0.0	0.0	69.1	13.3	82.4	0.0	0.0	0.0	0.5	0.5	1.1	
Exiting Leg Total	31						155						2						188

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:45 AM	Bennington Street						Crescent Avenue						Bennington Street						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
7:45 AM	0	0	0	0	0	0	0	0	0	0	21	2	23	0	0	0	0	0	0	23
8:00 AM	0	0	0	0	0	0	0	0	0	0	44	7	51	0	0	0	0	0	0	51
8:15 AM	0	0	0	0	0	0	0	0	0	0	20	6	26	0	0	0	0	0	0	26
8:30 AM	0	0	0	1	1	2	0	0	0	0	4	2	6	0	0	0	0	0	0	8
Total Volume	0	0	0	1	1	2	0	0	0	0	89	17	106	0	0	0	0	0	0	108
% Approach Total	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	84.0	16.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.000	0.506	0.607	0.520		0.000	0.000	0.000	0.000	0.000	0.000	0.529
Entering Leg	0	0	0	1	1	2	0	0	0	0	89	17	106	0	0	0	0	0	0	108
Exiting Leg	2						106						0						108	
Total	4						212						0						216	

PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
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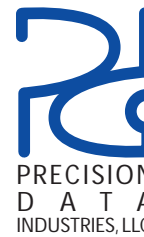
### Cars, Heavy Vehicles, and Buses (Combined)

	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	97	0	0	97	36	17	0	53	0	125	0	125	275
3:45 PM	89	0	1	90	35	12	0	47	0	135	0	135	272
Total	186	0	1	187	71	29	0	100	0	260	0	260	547
4:00 PM	102	0	0	102	43	12	0	55	0	140	0	140	297
4:15 PM	101	0	0	101	28	10	0	38	0	140	0	140	279
4:30 PM	96	0	0	96	21	12	0	33	0	132	0	132	261
4:45 PM	113	1	0	114	33	10	0	43	0	158	0	158	315
Total	412	1	0	413	125	44	0	169	0	570	0	570	1152
5:00 PM	102	0	0	102	36	15	0	51	0	143	0	143	296
5:15 PM	95	0	1	96	26	14	0	40	0	148	0	148	284
5:30 PM	90	0	1	91	27	13	0	40	1	162	0	163	294
5:45 PM	95	1	2	98	34	7	0	41	0	121	0	121	260
Total	382	1	4	387	123	49	0	172	1	574	0	575	1134
6:00 PM	76	0	0	76	38	10	0	48	0	118	0	118	242
6:15 PM	94	0	0	94	37	7	0	44	0	128	0	128	266
Total	170	0	0	170	75	17	0	92	0	246	0	246	508
Grand Total	1150	2	5	1157	394	139	0	533	1	1650	0	1651	3341
Approach %	99.4	0.2	0.4		73.9	26.1	0.0		0.1	99.9	0.0		
Total %	34.4	0.1	0.1	34.6	11.8	4.2	0.0	16.0	0.0	49.4	0.0	49.4	
Exiting Leg Total	2049				3				1289				3341
Cars	1134	2	5	1141	391	138	0	529	1	1633	0	1634	3304
% Cars	98.6	100.0	100.0	98.6	99.2	99.3	0.0	99.2	100.0	99.0	0.0	99.0	98.9
Exiting Leg Total	2029				3				1272				3304
Heavy Vehicles	11	0	0	11	3	1	0	4	0	9	0	9	24
% Heavy Vehicles	1.0	0.0	0.0	1.0	0.8	0.7	0.0	0.8	0.0	0.5	0.0	0.5	0.7
Exiting Leg Total	12				0				12				24
Buses	5	0	0	5	0	0	0	0	0	8	0	8	13
% Buses	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5	0.4
Exiting Leg Total	8				0				5				13

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:45 PM	113	1	0	114	33	10	0	43	0	158	0	158	315
5:00 PM	102	0	0	102	36	15	0	51	0	143	0	143	296
5:15 PM	95	0	1	96	26	14	0	40	0	148	0	148	284
5:30 PM	90	0	1	91	27	13	0	40	1	162	0	163	294
Total Volume	400	1	2	403	122	52	0	174	1	611	0	612	1189
% Approach Total	99.3	0.2	0.5		70.1	29.9	0.0		0.2	99.8	0.0		
PHF	0.885	0.250	0.500	0.884	0.847	0.867	0.000	0.853	0.250	0.943	0.000	0.939	0.944
Cars	393	1	2	396	122	52	0	174	1	608	0	609	1179
Cars %	98.3	100.0	100.0	98.3	100.0	100.0	0.0	100.0	100.0	99.5	0.0	99.5	99.2
Heavy Vehicles	5	0	0	5	0	0	0	0	0	2	0	2	7
Heavy Vehicles %	1.3	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.6
Buses	2	0	0	2	0	0	0	0	0	1	0	1	3
Buses %	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.3
Cars Enter Leg	393	1	2	396	122	52	0	174	1	608	0	609	1179
Heavy Enter Leg	5	0	0	5	0	0	0	0	0	2	0	2	7
Bus Enter Leg	2	0	0	2	0	0	0	0	0	1	0	1	3
Total Entering Leg	400	1	2	403	122	52	0	174	1	611	0	612	1189

PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**



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Class:

**Cars, Heavy Vehicles, and Buses (Combined)**

	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Cars Exiting Leg	732				2				445				1179
Heavy Exiting Leg	2				0				5				7
Buses Exiting Leg	1				0				2				3
Total Exiting Leg	735				2				452				1189

PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



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### Cars

	Bennington Street				Crescent Avenue				Bennington Street				
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	94	0	0	94	36	17	0	53	0	122	0	122	269
3:45 PM	86	0	1	87	35	12	0	47	0	131	0	131	265
Total	180	0	1	181	71	29	0	100	0	253	0	253	534
4:00 PM	102	0	0	102	42	12	0	54	0	135	0	135	291
4:15 PM	100	0	0	100	28	10	0	38	0	140	0	140	278
4:30 PM	96	0	0	96	20	11	0	31	0	130	0	130	257
4:45 PM	112	1	0	113	33	10	0	43	0	157	0	157	313
Total	410	1	0	411	123	43	0	166	0	562	0	562	1139
5:00 PM	97	0	0	97	36	15	0	51	0	143	0	143	291
5:15 PM	95	0	1	96	26	14	0	40	0	148	0	148	284
5:30 PM	89	0	1	90	27	13	0	40	1	160	0	161	291
5:45 PM	95	1	2	98	33	7	0	40	0	121	0	121	259
Total	376	1	4	381	122	49	0	171	1	572	0	573	1125
6:00 PM	76	0	0	76	38	10	0	48	0	118	0	118	242
6:15 PM	92	0	0	92	37	7	0	44	0	128	0	128	264
Total	168	0	0	168	75	17	0	92	0	246	0	246	506
Grand Total	1134	2	5	1141	391	138	0	529	1	1633	0	1634	3304
Approach %	99.4	0.2	0.4		73.9	26.1	0.0		0.1	99.9	0.0		
Total %	34.3	0.1	0.2	34.5	11.8	4.2	0.0	16.0	0.0	49.4	0.0	49.5	
Exiting Leg Total	2029				3				1272				3304

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:45 PM	112	1	0	113	33	10	0	43	0	157	0	157	313
5:00 PM	97	0	0	97	36	15	0	51	0	143	0	143	291
5:15 PM	95	0	1	96	26	14	0	40	0	148	0	148	284
5:30 PM	89	0	1	90	27	13	0	40	1	160	0	161	291
Total Volume	393	1	2	396	122	52	0	174	1	608	0	609	1179
% Approach Total	99.2	0.3	0.5		70.1	29.9	0.0		0.2	99.8	0.0		
PHF	0.877	0.250	0.500	0.876	0.847	0.867	0.000	0.853	0.250	0.950	0.000	0.946	0.942
Entering Leg	393	1	2	396	122	52	0	174	1	608	0	609	1179
Exiting Leg				732				2				445	1179
Total				1128				176				1054	2358



PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Heavy Vehicles

	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	2	0	0	2	0	0	0	0	0	2	0	2	4
3:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	3	0	0	3	0	0	0	0	0	3	0	3	6
4:00 PM	0	0	0	0	1	0	0	1	0	2	0	2	3
4:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	1	1	0	2	0	2	0	2	4
4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	2	0	0	2	2	1	0	3	0	4	0	4	9
5:00 PM	3	0	0	3	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	1	0	0	1	0	0	0	0	0	2	0	2	3
5:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	4	0	0	4	1	0	0	1	0	2	0	2	7
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total	2	0	0	2	0	0	0	0	0	0	0	0	2
Grand Total	11	0	0	11	3	1	0	4	0	9	0	9	24
Approach %	100.0	0.0	0.0		75.0	25.0	0.0		0.0	100.0	0.0		
Total %	45.8	0.0	0.0	45.8	12.5	4.2	0.0	16.7	0.0	37.5	0.0	37.5	
Exiting Leg Total	12				0				12				24

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	2	0	0	2	0	0	0	0	0	2	0	2	4
3:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
4:00 PM	0	0	0	0	1	0	0	1	0	2	0	2	3
4:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	4	0	0	4	1	0	0	1	0	5	0	5	10
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.250	0.000	0.000	0.250	0.000	0.625	0.000	0.625	0.625
Entering Leg	4	0	0	4	1	0	0	1	0	5	0	5	10
Exiting Leg				6				0				4	10
Total				10				1				9	20

PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Buses

	Bennington Street				Crescent Avenue				Bennington Street				Total
	North				East				South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
3:45 PM	2	0	0	2	0	0	0	0	0	3	0	3	5
Total	3	0	0	3	0	0	0	0	0	4	0	4	7
4:00 PM	0	0	0	0	0	0	0	0	0	3	0	3	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	4	0	4	4
5:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	2	0	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	5	0	0	5	0	0	0	0	0	8	0	8	13
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	38.5	0.0	0.0	38.5	0.0	0.0	0.0	0.0	0.0	61.5	0.0	61.5	
Exiting Leg Total	8				0				5				13

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Bennington Street				Crescent Avenue				Bennington Street				Total	
	North				East				South					
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
3:30 PM	1	0	0	1	0	0	0	0	0	0	1	0	1	2
3:45 PM	2	0	0	2	0	0	0	0	0	0	3	0	3	5
4:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	3	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	3	0	0	3	0	0	0	0	0	0	7	0	7	10
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0			0.0	100.0	0.0		
PHF	0.375	0.000	0.000	0.375	0.000	0.000	0.000	0.000		0.000	0.583	0.000	0.583	0.500
Entering Leg	3	0	0	3	0	0	0	0		0	7	0	7	10
Exiting Leg	7				0					3				10
Total	10				0					10				20

PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Bicycles (on Roadway and Crosswalks)

	Bennington Street						Crescent Avenue						Bennington Street						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	3
Total	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2	0	0	0	0	2	0	0	0	1	1	2	0	1	0	0	1	2	6	
Approach %	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	50.0	50.0		0.0	50.0	0.0	0.0	50.0			
Total %	33.3	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	16.7	16.7	33.3	0.0	16.7	0.0	0.0	16.7	33.3		
Exiting Leg Total	1						2						3						6	

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:30 PM	Bennington Street						Crescent Avenue						Bennington Street						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Total Volume	2	0	0	0	0	2	0	0	0	0	1	1	0	1	0	0	1	2	5	
% Approach Total	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		0.0	50.0	0.0	0.0	50.0			
PHF	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.250	0.000	0.000	0.250	0.500	0.417	
Entering Leg	2	0	0	0	0	2	0	0	0	0	1	1	0	1	0	0	1	2	5	
Exiting Leg						1						1						3	5	
Total						3						2						5	10	

PDI File #: **175607 (45)**  
 Location: **N: Bennington Street S: Bennington Street**  
 Location: **E: Crescent Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

### Pedestrians

	Bennington Street						Crescent Avenue						Bennington Street						Total
	North						East						South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	
3:30 PM	0	0	0	0	1	1	0	0	0	0	13	13	0	0	0	0	0	0	14
3:45 PM	0	0	0	0	0	0	0	0	0	1	4	5	0	0	0	0	0	0	5
Total	0	0	0	0	1	1	0	0	0	1	17	18	0	0	0	0	0	0	19
4:00 PM	0	0	0	0	1	1	0	0	0	6	7	13	0	0	0	0	0	0	14
4:15 PM	0	0	0	1	2	3	0	0	0	2	0	2	0	0	0	0	0	0	5
4:30 PM	0	0	0	1	1	2	0	0	0	2	2	4	0	0	0	0	0	0	6
4:45 PM	0	0	0	1	0	1	0	0	0	2	5	7	0	0	0	1	0	1	9
Total	0	0	0	3	4	7	0	0	0	12	14	26	0	0	0	1	0	1	34
5:00 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
5:15 PM	0	0	0	3	4	7	0	0	0	5	3	8	0	0	0	0	0	0	15
5:30 PM	0	0	0	0	0	0	0	0	0	2	7	9	0	0	0	0	0	0	9
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
Total	0	0	0	3	4	7	0	0	0	10	11	21	0	0	0	0	0	0	28
6:00 PM	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0	0	0	4
6:15 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	1	2	3	0	0	0	0	2	2	0	0	0	0	0	0	5
Grand Total	0	0	0	7	11	18	0	0	0	23	44	67	0	0	0	1	0	1	86
Approach %	0.0	0.0	0.0	38.9	61.1		0.0	0.0	0.0	34.3	65.7		0.0	0.0	0.0	100.0	0.0		
Total %	0.0	0.0	0.0	8.1	12.8	20.9	0.0	0.0	0.0	26.7	51.2	77.9	0.0	0.0	0.0	1.2	0.0	1.2	
Exiting Leg Total	18						67						1						86

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	Bennington Street						Crescent Avenue						Bennington Street						Total	
	North						East						South							
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total		
3:30 PM	0	0	0	0	0	1	1	0	0	0	0	13	13	0	0	0	0	0	0	14
3:45 PM	0	0	0	0	0	0	0	0	0	0	1	4	5	0	0	0	0	0	0	5
4:00 PM	0	0	0	0	1	1	1	0	0	0	6	7	13	0	0	0	0	0	0	14
4:15 PM	0	0	0	1	2	3	3	0	0	0	2	0	2	0	0	0	0	0	0	5
Total Volume	0	0	0	1	4	5	5	0	0	0	9	24	33	0	0	0	0	0	0	38
% Approach Total	0.0	0.0	0.0	20.0	80.0			0.0	0.0	0.0	27.3	72.7		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.250	0.500	0.417		0.000	0.000	0.000	0.375	0.462	0.635	0.000	0.000	0.000	0.000	0.000	0.000	0.679
Entering Leg	0	0	0	1	4	5	5	0	0	0	9	24	33	0	0	0	0	0	0	38
Exiting Leg	5						33						0						38	
Total	10						66						0						76	

PDI File #: 175607 (46)  
Location: N: State Road S: Bennington Street NE: Unity Avenue  
Location: E: Winthrop Avenue W: Winthrop Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume  
Site Code: 13796.00  
Count Date: Tuesday, May 09, 2017  
Start Time: 6:30 AM  
End Time: 9:30 AM  
Class:



Cars, Heavy Vehicles, and Buses (Combined)

	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total	
	North						Northeast						East						South						West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
6:30 AM	35	170	2	1	0	208	0	0	0	0	0	0	0	0	0	0	1	0	1	7	0	13	54	0	74	75	17	2	5	0	99	382
6:45 AM	36	158	4	0	0	198	0	1	0	0	0	0	1	0	0	0	0	0	0	8	0	18	33	0	59	70	20	0	3	0	93	351
Total	71	328	6	1	0	406	0	1	0	0	0	0	1	0	0	0	0	1	0	15	0	31	87	0	133	145	37	2	8	0	192	733
7:00 AM	33	202	4	0	0	239	0	0	0	0	0	0	0	0	0	0	0	0	15	0	36	79	0	130	77	17	0	8	0	102	471	
7:15 AM	37	157	2	0	0	196	0	0	0	0	0	0	0	0	0	0	0	0	5	0	57	102	0	164	119	20	0	7	0	146	506	
7:30 AM	39	193	6	0	1	239	0	0	0	0	0	0	0	0	0	0	0	0	6	0	45	74	0	125	93	23	0	11	0	127	491	
7:45 AM	57	150	5	0	0	212	0	0	0	0	0	0	0	0	0	0	0	0	12	0	35	90	0	137	80	22	0	11	0	113	462	
Total	166	702	17	0	1	886	0	0	0	0	0	0	0	0	0	0	0	0	38	0	173	345	0	556	369	82	0	37	0	488	1930	
8:00 AM	40	179	3	0	0	222	0	0	0	0	0	0	0	0	0	0	0	0	12	0	39	76	0	127	68	30	1	10	0	109	458	
8:15 AM	30	158	7	1	0	196	0	0	0	0	0	0	0	0	0	0	0	0	10	0	31	62	0	103	78	32	0	8	0	118	417	
8:30 AM	27	121	7	0	0	155	0	0	0	0	0	0	0	0	1	2	0	0	3	15	0	27	62	0	104	76	29	1	13	0	119	381
8:45 AM	35	116	4	0	0	155	1	0	0	0	0	0	1	0	0	0	0	0	0	10	0	20	57	0	87	79	35	0	11	0	125	368
Total	132	574	21	1	0	728	1	0	0	0	0	0	1	0	1	2	0	0	3	47	0	117	257	0	421	301	126	2	42	0	471	1624
9:00 AM	28	89	4	1	0	122	1	0	0	0	0	0	1	0	0	0	0	0	0	12	0	21	52	0	85	69	34	0	11	0	114	322
9:15 AM	26	77	7	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	26	55	0	91	62	39	0	3	0	104	305
Total	54	166	11	1	0	232	1	0	0	0	0	0	1	0	0	0	0	0	0	22	0	47	107	0	176	131	73	0	14	0	218	627
Grand Total	423	1770	55	3	1	2252	2	1	0	0	0	3	0	1	2	1	0	4	122	0	368	796	0	1286	946	318	4	101	0	1369	4914	
Approach %	18.8	78.6	2.4	0.1	0.0		66.7	33.3	0.0	0.0	0.0		0.0	25.0	50.0	25.0	0.0		9.5	0.0	28.6	61.9	0.0		69.1	23.2	0.3	7.4	0.0			
Total %	8.6	36.0	1.1	0.1	0.0	45.8	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	2.5	0.0	7.5	16.2	0.0	26.2	19.3	6.5	0.1	2.1	0.0	27.9		
Exiting Leg Total	473						7						495						2717						1222						4914	
Cars	412	1746	52	3	1	2214	2	1	0	0	0	3	0	1	2	1	0	4	120	0	360	760	0	1240	921	294	3	96	0	1314	4775	
% Cars	97.4	98.6	94.5	100.0	100.0	98.3	100.0	100.0	0.0	0.0	0.0	100.0	0.0	100.0	100.0	100.0	0.0	100.0	98.4	0.0	97.8	95.5	0.0	96.4	97.4	92.5	75.0	95.0	0.0	96.0	97.2	
Exiting Leg Total	460						6						466						2668						1175						4775	
Heavy Vehicles	4	9	3	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	20	0	25	16	9	1	3	0	29	70	
% Heavy Vehicles	0.9	0.5	5.5	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.1	2.5	0.0	1.9	1.7	2.8	25.0	3.0	0.0	2.1	1.4	
Exiting Leg Total	7						1						13						25						24						70	
Buses	7	15	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	16	0	21	9	15	0	2	0	26	69	
% Buses	1.7	0.8	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.1	2.0	0.0	1.6	1.0	4.7	0.0	2.0	0.0	1.9	1.4	
Exiting Leg Total	6						0						16						24						23						69	

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total
	North						Northeast						East						South						West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	33	202	4	0	0	239	0	0	0	0	0	0	0	0	0	0	0	0	15	0	36	79	0	130	77	17	0	8	0	102	471
7:15 AM	37	157	2	0	0	196	0	0	0	0	0	0	0	0	0	0	0	0	5	0	57	102	0	164	119	20	0	7	0	146	506
7:30 AM	39	193	6	0	1	239	0	0	0	0	0	0	0	0	0	0	0	0	6	0	45	74	0	125	93	23	0	11	0	127	491
7:45 AM	57	150	5	0	0	212	0	0	0	0	0	0	0	0	0	0	0	0	12	0	35	90	0	137	80	22	0	11	0	113	462
Total Volume	166	702	17	0	1	886	0	0	0	0	0	0	0	0	0	0	0	0	38	0	173	345	0	556	369	82	0	37	0	488	1930
% Approach Total	18.7	79.2	1.9	0.0	0.1		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		6.8	0.0	31.1	62.1	0.0		75.6	16.8	0.0	7.6	0.0		

PDI File #: **175607 (46)**  
 Location: **N: State Road S: Bennington Street NE: Unity Avenue**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



**Cars, Heavy Vehicles, and Buses (Combined)**

		State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total
		North						Northeast						East						South						West						
		Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
PHF		0.728	0.869	0.708	0.000	0.250	0.927	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.633	0.000	0.759	0.846	0.000	0.848	0.775	0.891	0.000	0.841	0.000	0.836	0.954
Cars		162	690	16	0	1	869	0	0	0	0	0	0	0	0	0	0	0	0	37	0	170	328	0	535	361	75	0	35	0	471	1875
Cars %		97.6	98.3	94.1	0.0	100.0	98.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.4	0.0	98.3	95.1	0.0	96.2	97.8	91.5	0.0	94.6	0.0	96.5	97.2	
Heavy Vehicles		1	3	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	6	3	3	0	0	0	6	17	
Heavy Vehicles %		0.6	0.4	5.9	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.4	0.0	1.1	0.8	3.7	0.0	0.0	0.0	1.2	0.9	
Buses		3	9	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	12	0	15	5	4	0	2	0	11	38
Buses %		1.8	1.3	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	1.2	3.5	0.0	2.7	1.4	4.9	0.0	5.4	0.0	2.3	2.0	
Cars Enter Leg		162	690	16	0	1	869	0	0	0	0	0	0	0	0	0	0	0	37	0	170	328	0	535	361	75	0	35	0	471	1875	
Heavy Enter Leg		1	3	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	6	3	3	0	0	0	6	17	
Bus Enter Leg		3	9	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	1	0	2	12	0	15	5	4	0	2	0	11	38	
Total Entering Leg		166	702	17	0	1	886	0	0	0	0	0	0	0	0	0	0	0	38	0	173	345	0	556	369	82	0	37	0	488	1930	
Cars Exiting Leg														128						1051						490						
Heavy Exiting Leg														4						6						6						
Buses Exiting Leg														5						14						15						
Total Exiting Leg		211						0						137						1071						511						

PDI File #: **175607 (46)**  
 Location: **N: State Road S: Bennington Street NE: Unity Avenue**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



**Cars**

	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total
	North						Northeast						East						South						West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
6:30 AM	35	167	2	1	0	205	0	0	0	0	0	0	0	0	0	1	0	1	7	0	12	52	0	71	75	16	1	5	0	97	374
6:45 AM	35	157	4	0	0	196	0	1	0	0	0	1	0	0	0	0	0	0	8	0	18	33	0	59	67	19	0	3	0	89	345
Total	70	324	6	1	0	401	0	1	0	0	0	1	0	0	0	1	0	1	15	0	30	85	0	130	142	35	1	8	0	186	719
7:00 AM	33	199	4	0	0	236	0	0	0	0	0	0	0	0	0	0	0	0	15	0	35	72	0	122	72	15	0	6	0	93	451
7:15 AM	34	152	2	0	0	188	0	0	0	0	0	0	0	0	0	0	0	0	4	0	57	96	0	157	118	17	0	7	0	142	487
7:30 AM	38	191	5	0	1	235	0	0	0	0	0	0	0	0	0	0	0	0	6	0	44	72	0	122	92	22	0	11	0	125	482
7:45 AM	57	148	5	0	0	210	0	0	0	0	0	0	0	0	0	0	0	0	12	0	34	88	0	134	79	21	0	11	0	111	455
Total	162	690	16	0	1	869	0	0	0	0	0	0	0	0	0	0	0	0	37	0	170	328	0	535	361	75	0	35	0	471	1875
8:00 AM	39	178	3	0	0	220	0	0	0	0	0	0	0	0	0	0	0	0	11	0	39	75	0	125	64	26	1	8	0	99	444
8:15 AM	29	156	7	1	0	193	0	0	0	0	0	0	0	0	0	0	0	0	10	0	31	57	0	98	75	31	0	8	0	114	405
8:30 AM	26	118	7	0	0	151	0	0	0	0	0	0	0	1	2	0	0	3	15	0	27	59	0	101	74	25	1	13	0	113	368
8:45 AM	34	115	4	0	0	153	1	0	0	0	0	1	0	0	0	0	0	0	10	0	19	54	0	83	77	35	0	11	0	123	360
Total	128	567	21	1	0	717	1	0	0	0	0	1	0	1	2	0	0	3	46	0	116	245	0	407	290	117	2	40	0	449	1577
9:00 AM	28	89	4	1	0	122	1	0	0	0	0	1	0	0	0	0	0	0	12	0	19	50	0	81	68	29	0	10	0	107	311
9:15 AM	24	76	5	0	0	105	0	0	0	0	0	0	0	0	0	0	0	0	10	0	25	52	0	87	60	38	0	3	0	101	293
Total	52	165	9	1	0	227	1	0	0	0	0	1	0	0	0	0	0	0	22	0	44	102	0	168	128	67	0	13	0	208	604
Grand Total	412	1746	52	3	1	2214	2	1	0	0	0	3	0	1	2	1	0	4	120	0	360	760	0	1240	921	294	3	96	0	1314	4775
Approach %	18.6	78.9	2.3	0.1	0.0		66.7	33.3	0.0	0.0	0.0		0.0	25.0	50.0	25.0	0.0		9.7	0.0	29.0	61.3	0.0		70.1	22.4	0.2	7.3	0.0		
Total %	8.6	36.6	1.1	0.1	0.0	46.4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	2.5	0.0	7.5	15.9	0.0	26.0	19.3	6.2	0.1	2.0	0.0	27.5	
Exiting Leg Total	460						6						466						2668						1175						4775

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total
	North						Northeast						East						South						West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	33	199	4	0	0	236	0	0	0	0	0	0	0	0	0	0	0	0	15	0	35	72	0	122	72	15	0	6	0	93	451
7:15 AM	34	152	2	0	0	188	0	0	0	0	0	0	0	0	0	0	0	0	4	0	57	96	0	157	118	17	0	7	0	142	487
7:30 AM	38	191	5	0	1	235	0	0	0	0	0	0	0	0	0	0	0	0	6	0	44	72	0	122	92	22	0	11	0	125	482
7:45 AM	57	148	5	0	0	210	0	0	0	0	0	0	0	0	0	0	0	0	12	0	34	88	0	134	79	21	0	11	0	111	455
Total Volume	162	690	16	0	1	869	0	0	0	0	0	0	0	0	0	0	0	0	37	0	170	328	0	535	361	75	0	35	0	471	1875
% Approach Total	18.6	79.4	1.8	0.0	0.1		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		6.9	0.0	31.8	61.3	0.0		76.6	15.9	0.0	7.4	0.0		
PHF	0.711	0.867	0.800	0.000	0.250	0.921	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.617	0.000	0.746	0.854	0.000	0.852	0.765	0.852	0.000	0.795	0.000	0.829	0.963
Entering Leg	162	690	16	0	1	869	0	0	0	0	0	0	0	0	0	0	0	0	37	0	170	328	0	535	361	75	0	35	0	471	1875
Exiting Leg						206						0					128							1051						490	1875
Total						1075						0					128							1586						961	3750

PDI File #: **175607 (46)**  
 Location: **N: State Road S: Bennington Street NE: Unity Avenue**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Heavy Vehicles

	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total	
	North						Northeast						East						South						West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
6:30 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	1	0	0	1	4
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
Total	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	3	0	1	0	0	4	7
7:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2	0	0	0	0	0	2	5
7:15 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	1	2	0	0	0	0	3	6
7:30 AM	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	3
7:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	1	3
Total	1	3	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	6	3	3	0	0	0	0	6	17
8:00 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	3	2	0	2	0	0	7	9
8:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	3	1	0	0	0	0	4	9
8:30 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	1	0	0	0	0	0	1	6
8:45 AM	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4	1	0	0	0	0	0	1	7
Total	2	4	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	10	0	12	8	3	0	2	0	0	13	31
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	0	2	0	1	0	0	3	6
9:15 AM	1	1	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2	1	0	0	0	0	3	9
Total	1	1	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	5	2	3	0	1	0	0	6	15
Grand Total	4	9	3	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	20	0	25	16	9	1	3	0	0	29	70
Approach %	25.0	56.3	18.8	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		4.0	0.0	16.0	80.0	0.0		55.2	31.0	3.4	10.3	0.0			
Total %	5.7	12.9	4.3	0.0	0.0	22.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	5.7	28.6	0.0	35.7	22.9	12.9	1.4	4.3	0.0	41.4		
Exiting Leg Total	7						1						13						25						24						70	

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

8:00 AM	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue							
	North						Northeast						East						South						West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
8:00 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	3	2	0	2	0	7	9
8:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	3	1	0	0	0	0	4	9
8:30 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	1	0	0	0	0	0	1	6
8:45 AM	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4	1	0	0	0	0	0	1	7
Total Volume	2	4	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	10	0	12	8	3	0	2	0	13	31
% Approach Total	33.3	66.7	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		8.3	0.0	8.3	83.3	0.0		61.5	23.1	0.0	15.4	0.0			
PHF	0.500	0.500	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.625	0.000	0.750	0.667	0.375	0.000	0.250	0.000	0.464	0.861	
Entering Leg	2	4	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	10	0	12	8	3	0	2	0	13	31	
Exiting Leg						3						0						4					12		12					12	31	
Total						9						0						4					24							25	62	



PDI File #: **175607 (46)**  
 Location: **N: State Road S: Bennington Street NE: Unity Avenue**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **6:30 AM**  
 End Time: **9:30 AM**  
 Class:



### Buses

	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total	
	North						Northeast						East						South						West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
6:30 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	0	1	4
6:45 AM	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3	
Total	1	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	2	7	
7:00 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	3	2	0	2	0	0	7	15
7:15 AM	2	5	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4	0	5	0	1	0	0	0	1	13	
7:30 AM	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	1	0	0	0	2	6	
7:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	0	0	0	0	1	4	
Total	3	9	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	12	0	15	5	4	0	2	0	11	38	
8:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	2	0	0	0	0	3	5
8:15 AM	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3	
8:30 AM	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	5	7	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	
Total	2	3	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3	6	0	0	0	9	16	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	3	0	0	0	4	5	
9:15 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	3	
Total	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	1	3	0	0	0	4	8	
Grand Total	7	15	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	16	0	21	9	15	0	2	0	26	69	
Approach %	31.8	68.2	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		4.8	0.0	19.0	76.2	0.0		34.6	57.7	0.0	7.7	0.0			
Total %	10.1	21.7	0.0	0.0	0.0	31.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	5.8	23.2	0.0	30.4	13.0	21.7	0.0	2.9	0.0	37.7		
Exiting Leg Total	6						0						16						24						23						69	

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:00 AM	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total	
	North						Northeast						East						South						West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
7:00 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	3	2	0	2	0	7	15	
7:15 AM	2	5	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	5	0	1	0	0	0	1	13		
7:30 AM	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	1	0	0	0	2	6	
7:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	0	0	0	0	1	4	
Total Volume	3	9	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	12	0	15	5	4	0	2	0	11	38
% Approach Total	25.0	75.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		6.7	0.0	13.3	80.0	0.0		45.5	36.4	0.0	18.2	0.0			
PHF	0.375	0.450	0.000	0.000	0.000	0.429	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.500	0.000	0.625	0.417	0.500	0.000	0.250	0.000	0.393	0.633	
Entering Leg	3	9	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	12	0	15	5	4	0	2	0	11	38	
Exiting Leg	4						0						5						14						15						38	
Total	16						0						5						29						26						76	

PDI File #: 175607 (46)  
Location: N: State Road S: Bennington Street NE: Unity Avenue  
Location: E: Winthrop Avenue W: Winthrop Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume  
Site Code: 13796.00  
Count Date: Tuesday, May 09, 2017  
Start Time: 6:30 AM  
End Time: 9:30 AM  
Class:



Bicycles (on Roadway and Crosswalks)

	State Road								Unity Avenue								Winthrop Avenue								Bennington Street								Winthrop Avenue								Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:30 AM	State Road								Unity Avenue								Winthrop Avenue								Bennington Street								Winthrop Avenue								Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	North								Northeast								East								South								West																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SB	CW-NW	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PDI File #: 175607 (46)  
Location: N: State Road S: Bennington Street NE: Unity Avenue  
Location: E: Winthrop Avenue W: Winthrop Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume  
Site Code: 13796.00  
Count Date: Tuesday, May 09, 2017  
Start Time: 6:30 AM  
End Time: 9:30 AM  
Class:



### Pedestrians

	State Road									Unity Avenue									Winthrop Avenue									Bennington Street									Winthrop Avenue									Total
	North									Northeast									East									South									West									
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total						
6:30 AM	0	0	0	0	0	0	0	10	10	0	0	0	0	0	2	4	6	0	0	0	0	0	1	1	2	0	0	0	0	0	12	3	15	0	0	0	0	0	3	20	23	56				
6:45 AM	0	0	0	0	0	0	6	13	19	0	0	0	0	0	10	4	14	0	0	0	0	0	12	1	13	0	0	0	0	0	18	2	20	0	0	0	0	0	8	40	48	114				
Total	0	0	0	0	0	0	6	23	29	0	0	0	0	0	12	8	20	0	0	0	0	0	13	2	15	0	0	0	0	0	30	5	35	0	0	0	0	0	11	60	71	170				
7:00 AM	0	0	0	0	0	0	4	15	19	0	0	0	0	0	15	4	19	0	0	0	0	0	20	2	22	0	0	0	0	0	26	2	28	0	0	0	0	0	6	27	33	121				
7:15 AM	0	0	0	0	0	0	4	27	31	0	0	0	0	0	20	2	22	0	0	0	0	0	23	1	24	0	0	0	0	0	18	5	23	0	0	0	0	0	4	48	52	152				
7:30 AM	0	0	0	0	0	0	3	27	30	0	0	0	0	0	8	4	12	0	0	0	0	0	3	2	5	0	0	0	0	0	13	2	15	0	0	0	0	0	6	41	47	109				
7:45 AM	0	0	0	0	0	0	4	19	23	0	0	0	0	0	14	5	19	0	0	0	0	0	16	0	16	0	0	0	0	0	25	6	31	0	0	0	0	0	3	38	41	130				
Total	0	0	0	0	0	0	15	88	103	0	0	0	0	0	57	15	72	0	0	0	0	0	62	5	67	0	0	0	0	0	82	15	97	0	0	0	0	0	19	154	173	512				
8:00 AM	0	0	0	0	0	0	0	21	21	0	0	0	0	0	39	13	52	0	0	0	0	0	42	8	50	0	0	0	0	0	24	4	28	0	0	0	0	0	1	49	50	201				
8:15 AM	0	0	0	0	0	0	2	18	20	0	0	0	0	0	11	6	17	0	0	0	0	0	19	1	20	0	0	0	0	0	25	4	29	0	0	0	0	0	3	29	32	118				
8:30 AM	0	0	0	0	0	0	0	12	12	0	0	0	0	0	9	7	16	0	0	0	0	0	3	3	6	0	0	0	0	0	19	9	28	0	0	0	0	0	5	24	29	91				
8:45 AM	0	0	0	0	0	0	6	12	18	0	0	0	0	0	5	5	10	0	0	0	0	0	2	1	3	0	0	0	0	0	15	2	17	0	0	0	0	0	5	22	27	75				
Total	0	0	0	0	0	0	8	63	71	0	0	0	0	0	64	31	95	0	0	0	0	0	66	13	79	0	0	0	0	0	83	19	102	0	0	0	0	0	14	124	138	485				
9:00 AM	0	0	0	0	0	0	4	9	13	0	0	0	0	0	3	2	5	0	0	0	0	0	5	1	6	0	0	0	0	0	13	3	16	0	0	0	0	0	5	17	22	62				
9:15 AM	0	0	0	0	0	0	1	7	8	0	0	0	0	0	3	0	3	0	0	0	0	0	1	1	2	0	0	0	0	0	8	2	10	0	0	0	0	0	5	10	15	38				
Total	0	0	0	0	0	0	5	16	21	0	0	0	0	0	6	2	8	0	0	0	0	0	6	2	8	0	0	0	0	0	21	5	26	0	0	0	0	0	10	27	37	100				
Grand Total	0	0	0	0	0	0	34	190	224	0	0	0	0	0	139	56	195	0	0	0	0	0	147	22	169	0	0	0	0	0	216	44	260	0	0	0	0	0	54	365	419	1267				
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	15.2	84.8		0.0	0.0	0.0	0.0	0.0	71.3	28.7		0.0	0.0	0.0	0.0	0.0	87.0	13.0		0.0	0.0	0.0	0.0	0.0	83.1	16.9		0.0	0.0	0.0	0.0	0.0	12.9	87.1						
Total %	0.0	0.0	0.0	0.0	0.0	0.0	2.7	15.0	17.7	0.0	0.0	0.0	0.0	0.0	11.0	4.4	15.4	0.0	0.0	0.0	0.0	0.0	11.6	1.7	13.3	0.0	0.0	0.0	0.0	0.0	17.0	3.5	20.5	0.0	0.0	0.0	0.0	0.0	4.3	28.8	33.1					
Exiting Leg Total	224									195									169									260									419									1267

Peak Hour Analysis from 06:30 AM to 09:30 AM begins at:

7:15 AM	State Road								Unity Avenue								Winthrop Avenue								Bennington Street								Winthrop Avenue								Total
	North								Northeast								East								South								West								
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total	
7:15 AM	0	0	0	0	0	4	27	31	0	0	0	0	0	20	2	22	0	0	0	0	0	23	1	24	0	0	0	0	0	18	5	23	0	0	0	0	0	4	48	52	152
7:30 AM	0	0	0	0	0	3	27	30	0	0	0	0	0	8	4	12	0	0	0	0	0	3	2	5	0	0	0	0	0	13	2	15	0	0	0	0	0	6	41	47	109
7:45 AM	0	0	0	0	0	4	19	23	0	0	0	0	0	14	5	19	0	0	0	0	0	16	0	16	0	0	0	0	0	25	6	31	0	0	0	0	0	3	38	41	130
8:00 AM	0	0	0	0	0	0	21	21	0	0	0	0	0	39	13	52	0	0	0	0	0	42	8	50	0	0	0	0	0	24	4	28	0	0	0	0	0	1	49	50	201
Total Volume	0	0	0	0	0	11	94	105	0	0	0	0	0	81	24	105	0	0	0	0	0	84	11	95	0	0	0	0	0	80	17	97	0	0	0	0	0	14	176	190	592
% Approach Total	0.0	0.0	0.0	0.0	0.0	10.5	89.5		0.0	0.0	0.0	0.0	0.0	77.1	22.9		0.0	0.0	0.0	0.0	0.0	88.4	11.6		0.0	0.0	0.0	0.0	0.0	82.5	17.5		0.0	0.0	0.0	0.0	0.0	7.4	92.6		
PHF	0.000	0.000	0.000	0.000	0.000	0.688	0.870	0.847	0.000	0.000	0.000	0.000	0.000	0.519	0.462	0.505	0.000	0.000	0.000	0.000	0.000	0.500	0.344	0.475	0.000	0.000	0.000	0.000	0.000	0.800	0.708	0.782	0.000	0.000	0.000	0.000	0.000	0.583	0.898	0.913	0.736
Entering Leg	0	0	0	0	0	11	94	105	0	0	0	0	0	81	24	105	0	0	0	0	0	84	11	95	0	0	0	0	0	80	17	97	0	0	0	0	0	14	176	190	592
Exiting Leg	105								105								95								97								190								592
Total	210								210								190								194								380								1184

PDI File #: **175607 (46)**  
 Location: **N: State Road S: Bennington Street NE: Unity Avenue**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total
	North						Northeast						East						South						West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
3:30 PM	39	53	9	0	0	101	1	0	0	0	0	1	0	0	0	0	0	0	8	2	63	89	0	162	51	64	0	9	0	124	388
3:45 PM	34	41	8	1	0	84	1	0	0	0	0	1	0	0	0	0	0	0	14	0	78	87	0	179	48	51	0	22	0	121	385
Total	73	94	17	1	0	185	2	0	0	0	0	2	0	0	0	0	0	0	22	2	141	176	0	341	99	115	0	31	0	245	773
4:00 PM	31	52	10	0	0	93	1	0	0	1	0	2	0	0	0	0	0	0	10	0	78	73	0	161	50	64	0	18	0	132	388
4:15 PM	37	38	9	0	0	84	0	0	0	0	0	0	0	0	0	1	0	1	11	0	89	93	0	193	66	63	0	21	0	150	428
4:30 PM	24	44	15	0	0	83	0	0	0	0	0	0	0	0	0	0	0	0	14	0	66	75	0	155	55	64	0	18	0	137	375
4:45 PM	36	39	10	0	1	86	1	0	1	0	0	2	0	0	0	0	0	0	26	0	79	85	0	190	65	65	0	18	0	148	426
Total	128	173	44	0	1	346	2	0	1	1	0	4	0	0	0	1	0	1	61	0	312	326	0	699	236	256	0	75	0	567	1617
5:00 PM	29	42	11	0	0	82	0	0	0	0	0	0	0	0	0	0	0	0	17	0	91	92	0	200	59	51	1	27	0	138	420
5:15 PM	28	40	5	0	0	73	0	1	1	0	0	2	0	0	0	0	0	0	22	0	82	71	1	176	58	71	1	22	0	152	403
5:30 PM	35	49	8	0	1	93	0	0	0	0	0	0	0	0	0	0	0	0	16	0	83	87	0	186	49	62	0	6	0	117	396
5:45 PM	38	41	12	0	0	91	0	0	0	0	0	0	0	0	0	0	0	0	17	0	73	88	0	178	57	67	0	14	0	138	407
Total	130	172	36	0	1	339	0	1	1	0	0	2	0	0	0	0	0	0	72	0	329	338	1	740	223	251	2	69	0	545	1626
6:00 PM	40	24	13	0	0	77	0	0	0	0	0	0	0	0	0	0	0	0	27	0	43	63	0	133	56	68	2	26	0	152	362
6:15 PM	28	38	14	0	0	80	0	0	0	0	0	0	0	0	0	0	0	0	19	1	91	72	0	183	48	55	0	20	0	123	386
Total	68	62	27	0	0	157	0	0	0	0	0	0	0	0	0	0	0	0	46	1	134	135	0	316	104	123	2	46	0	275	748
Grand Total	399	501	124	1	2	1027	4	1	2	1	0	8	0	0	0	1	0	1	201	3	916	975	1	2096	662	745	4	221	0	1632	4764
Approach %	38.9	48.8	12.1	0.1	0.2		50.0	12.5	25.0	12.5	0.0		0.0	0.0	0.0	100.0	0.0		9.6	0.1	43.7	46.5	0.0		40.6	45.6	0.2	13.5	0.0		
Total %	8.4	10.5	2.6	0.0	0.0	21.6	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.1	19.2	20.5	0.0	44.0	13.9	15.6	0.1	4.6	0.0	34.3	
Exiting Leg Total	1143						8						1071						1167						1375						4764
Cars	381	492	121	1	2	997	4	1	2	1	0	8	0	0	0	1	0	1	200	3	910	961	1	2075	652	732	4	220	0	1608	4689
% Cars	95.5	98.2	97.6	100.0	100.0	97.1	100.0	100.0	100.0	100.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	100.0	99.5	100.0	99.3	98.6	100.0	99.0	98.5	98.3	100.0	99.5	0.0	98.5	98.4
Exiting Leg Total	1136						8						1054						1148						1343						4689
Heavy Vehicles	9	7	2	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	10	0	13	7	6	0	0	0	13	44
% Heavy Vehicles	2.3	1.4	1.6	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.2	1.0	0.0	0.6	1.1	0.8	0.0	0.0	0.0	0.8	0.9
Exiting Leg Total	2						0						9						14						19						44
Buses	9	2	1	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	8	3	7	0	1	0	11	31
% Buses	2.3	0.4	0.8	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.4	0.5	0.9	0.0	0.5	0.0	0.7	0.7
Exiting Leg Total	5						0						8						5						13						31

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:15 PM	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total	
	North						Northeast						East						South						West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
4:15 PM	37	38	9	0	0	84	0	0	0	0	0	0	0	0	0	0	1	0	1	11	0	89	93	0	193	66	63	0	21	0	150	428
4:30 PM	24	44	15	0	0	83	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	66	75	0	155	55	64	0	18	0	137	375
4:45 PM	36	39	10	0	1	86	1	0	1	0	0	2	0	0	0	0	0	0	0	26	0	79	85	0	190	65	65	0	18	0	148	426
5:00 PM	29	42	11	0	0	82	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	91	92	0	200	59	51	1	27	0	138	420
Total Volume	126	163	45	0	1	335	1	0	1	0	0	2	0	0	0	1	0	1	68	0	325	345	0	738	245	243	1	84	0	573	1649	
% Approach Total	37.6	48.7	13.4	0.0	0.3		50.0	0.0	50.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		9.2	0.0	44.0	46.7	0.0		42.8	42.4	0.2	14.7	0.0			

PDI File #: **175607 (46)**  
 Location: **N: State Road S: Bennington Street NE: Unity Avenue**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Cars, Heavy Vehicles, and Buses (Combined)

		State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total						
		North						Northeast						East						South						West												
		Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total							
PHF		0.851	0.926	0.750	0.000	0.250	0.974	0.250	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.654	0.000	0.893	0.927	0.000	0.923	0.928	0.935	0.250	0.778	0.000	0.955	0.963						
Cars		123	159	42	0	1	325	1	0	1	0	0	2	0	0	0	1	0	1	67	0	323	342	0	732	240	238	1	83	0	562	1622						
Cars %		97.6	97.5	93.3	0.0	100.0	97.0	100.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	100.0	98.5	0.0	99.4	99.1	0.0	99.2	98.0	97.9	100.0	98.8	0.0	98.1	98.4						
Heavy Vehicles		1	2	2	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	5	5	3	0	0	0	8	18						
Heavy Vehicles %		0.8	1.2	4.4	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.3	0.9	0.0	0.7	2.0	1.2	0.0	0.0	0.0	1.4	1.1							
Buses		2	2	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	1	0	3	9						
Buses %		1.6	1.2	2.2	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.8	0.0	1.2	0.0	0.5	0.5							
Cars Enter Leg		123	159	42	0	1	325	1	0	1	0	0	2	0	0	0	1	0	1	67	0	323	342	0	732	240	238	1	83	0	562	1622						
Heavy Enter Leg		1	2	2	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	5	5	3	0	0	0	8	18						
Bus Enter Leg		2	2	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	1	0	3	9						
Total Entering Leg		126	163	45	0	1	335	1	0	1	0	0	2	0	0	0	1	0	1	68	0	325	345	0	738	245	243	1	84	0	573	1649						
Cars Exiting Leg		408												1						347						401						465						1622
Heavy Exiting Leg		1												0						6						7						4						18
Buses Exiting Leg		2												0						3						2						2						9
Total Exiting Leg		411												1						356						410						471						1649

PDI File #: **175607 (46)**  
 Location: **N: State Road S: Bennington Street NE: Unity Avenue**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



**Cars**

	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						
	North						Northeast						East						South						West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
3:30 PM	36	51	9	0	0	96	1	0	0	0	0	1	0	0	0	0	0	0	8	2	62	87	0	159	49	63	0	9	0	121	377
3:45 PM	33	40	8	1	0	82	1	0	0	0	0	1	0	0	0	0	0	0	14	0	76	86	0	176	46	51	0	22	0	119	378
Total	69	91	17	1	0	178	2	0	0	0	0	2	0	0	0	0	0	0	22	2	138	173	0	335	95	114	0	31	0	240	755
4:00 PM	28	52	10	0	0	90	1	0	0	1	0	2	0	0	0	0	0	0	10	0	77	68	0	155	50	62	0	18	0	130	377
4:15 PM	36	38	8	0	0	82	0	0	0	0	0	0	0	0	0	1	0	1	11	0	88	92	0	191	65	63	0	20	0	148	422
4:30 PM	24	44	13	0	0	81	0	0	0	0	0	0	0	0	0	0	0	0	13	0	66	74	0	153	55	62	0	18	0	135	369
4:45 PM	34	38	10	0	1	83	1	0	1	0	0	2	0	0	0	0	0	0	26	0	79	84	0	189	64	63	0	18	0	145	419
Total	122	172	41	0	1	336	2	0	1	1	0	4	0	0	0	1	0	1	60	0	310	318	0	688	234	250	0	74	0	558	1587
5:00 PM	29	39	11	0	0	79	0	0	0	0	0	0	0	0	0	0	0	0	17	0	90	92	0	199	56	50	1	27	0	134	412
5:15 PM	27	40	5	0	0	72	0	1	1	0	0	2	0	0	0	0	0	0	22	0	82	71	1	176	58	69	1	22	0	150	400
5:30 PM	34	49	8	0	1	92	0	0	0	0	0	0	0	0	0	0	0	0	16	0	83	86	0	185	48	61	0	6	0	115	392
5:45 PM	33	41	12	0	0	86	0	0	0	0	0	0	0	0	0	0	0	0	17	0	73	87	0	177	57	67	0	14	0	138	401
Total	123	169	36	0	1	329	0	1	1	0	0	2	0	0	0	0	0	0	72	0	328	336	1	737	219	247	2	69	0	537	1605
6:00 PM	39	24	13	0	0	76	0	0	0	0	0	0	0	0	0	0	0	0	27	0	43	62	0	132	56	67	2	26	0	151	359
6:15 PM	28	36	14	0	0	78	0	0	0	0	0	0	0	0	0	0	0	0	19	1	91	72	0	183	48	54	0	20	0	122	383
Total	67	60	27	0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	46	1	134	134	0	315	104	121	2	46	0	273	742
Grand Total	381	492	121	1	2	997	4	1	2	1	0	8	0	0	0	1	0	1	200	3	910	961	1	2075	652	732	4	220	0	1608	4689
Approach %	38.2	49.3	12.1	0.1	0.2		50.0	12.5	25.0	12.5	0.0		0.0	0.0	0.0	100.0	0.0		9.6	0.1	43.9	46.3	0.0		40.5	45.5	0.2	13.7	0.0		
Total %	8.1	10.5	2.6	0.0	0.0	21.3	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.1	19.4	20.5	0.0	44.3	13.9	15.6	0.1	4.7	0.0	34.3	
Exiting Leg Total	1136						8						1054						1148						1343						4689

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:45 PM	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						
	North						Northeast						East						South						West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
4:45 PM	34	38	10	0	1	83	1	0	1	0	0	2	0	0	0	0	0	0	26	0	79	84	0	189	64	63	0	18	0	145	419
5:00 PM	29	39	11	0	0	79	0	0	0	0	0	0	0	0	0	0	0	0	17	0	90	92	0	199	56	50	1	27	0	134	412
5:15 PM	27	40	5	0	0	72	0	1	1	0	0	2	0	0	0	0	0	0	22	0	82	71	1	176	58	69	1	22	0	150	400
5:30 PM	34	49	8	0	1	92	0	0	0	0	0	0	0	0	0	0	0	0	16	0	83	86	0	185	48	61	0	6	0	115	392
Total Volume	124	166	34	0	2	326	1	1	2	0	0	4	0	0	0	0	0	0	81	0	334	333	1	749	226	243	2	73	0	544	1623
% Approach Total	38.0	50.9	10.4	0.0	0.6		25.0	25.0	50.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		10.8	0.0	44.6	44.5	0.1		41.5	44.7	0.4	13.4	0.0		
PHF	0.912	0.847	0.773	0.000	0.500	0.886	0.250	0.250	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000		0.779	0.000	0.928	0.905	0.250	0.941	0.883	0.880	0.500	0.676	0.000	0.907	0.968
Entering Leg	124	166	34	0	2	326	1	1	2	0	0	4	0	0	0	0	0	0	81	0	334	333	1	749	226	243	2	73	0	544	1623
Exiting Leg						410						2					358						395						458	1623	
Total						736						6					358						1144						1002	3246	

PDI File #: **175607 (46)**  
 Location: **N: State Road S: Bennington Street NE: Unity Avenue**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Heavy Vehicles

	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue							
	North						Northeast						East						South						West							
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total		
3:30 PM	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	0	0	0	0	1	6
3:45 PM	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3	
Total	2	3	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	1	0	0	0	0	1	9
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	0	0	1	3
4:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	0	0	0	0	1	4
4:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	0	0	0	0	3
4:45 PM	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	2	0	0	0	3	6
Total	1	1	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5	0	7	2	3	0	0	0	5	16
5:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	5
5:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	2	3
5:45 PM	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	6
Total	6	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	4	3	0	0	0	7	16
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
6:15 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3
Grand Total	9	7	2	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	10	0	13	7	6	0	0	0	0	13	44
Approach %	50.0	38.9	11.1	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		7.7	0.0	15.4	76.9	0.0		53.8	46.2	0.0	0.0	0.0			
Total %	20.5	15.9	4.5	0.0	0.0	40.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	4.5	22.7	0.0	29.5	15.9	13.6	0.0	0.0	0.0	29.5		
Exiting Leg Total	2						0						9						14						19						44	

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total
	North						Northeast						East						South						West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
3:30 PM	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	0	0	0	0	1	6
3:45 PM	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	0	0	1	3
4:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	0	0	0	0	1	4
Total Volume	2	3	1	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	7	2	1	0	0	0	3	16
% Approach Total	33.3	50.0	16.7	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	28.6	71.4	0.0		66.7	33.3	0.0	0.0	0.0		
PHF	0.500	0.375	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.625	0.000	0.875	0.500	0.250	0.000	0.000	0.000	0.750	0.667
Entering Leg	2	3	1	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	7	2	1	0	0	0	3	16
Exiting Leg						2						0											5						7		16
Total	8						0						2						12						10						32

PDI File #: **175607 (46)**  
 Location: **N: State Road S: Bennington Street NE: Unity Avenue**  
 Location: **E: Winthrop Avenue W: Winthrop Avenue**  
 City, State: **Revere, MA**  
 Client: **VHB/ A. Berthaume**  
 Site Code: **13796.00**  
 Count Date: **Tuesday, May 09, 2017**  
 Start Time: **3:30 PM**  
 End Time: **6:30 PM**  
 Class:



### Buses

	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total
	North						Northeast						East						South						West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
3:30 PM	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	2	5
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	0	0	0	0	2	4
Total	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	3	1	0	0	0	4	9
4:00 PM	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4	0	1	0	0	0	1	8
4:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	
4:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	3
4:45 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	5	0	1	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4	0	3	0	1	0	4	14
5:00 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:30 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	5
6:00 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	3
Grand Total	9	2	1	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	8	3	7	0	1	0	11	31
Approach %	75.0	16.7	8.3	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	50.0	50.0	0.0		27.3	63.6	0.0	9.1	0.0		
Total %	29.0	6.5	3.2	0.0	0.0	38.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9	12.9	0.0	25.8	9.7	22.6	0.0	3.2	0.0	35.5	
Exiting Leg Total	5						0						8						5						13						31

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	State Road						Unity Avenue						Winthrop Avenue						Bennington Street						Winthrop Avenue						Total
	North						Northeast						East						South						West						
	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	
3:30 PM	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	2	5
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	0	0	0	0	2	4
4:00 PM	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4	0	1	0	0	0	1	8
4:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Total Volume	6	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	7	3	2	0	1	0	6	19
% Approach Total	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	42.9	57.1	0.0		50.0	33.3	0.0	16.7	0.0		
PHF	0.500	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.333	0.000	0.438	0.375	0.500	0.000	0.250	0.000	0.750	0.594
Entering Leg	6	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	7	3	2	0	1	0	6	19
Exiting Leg	4						0						2						3						10						19
Total	10						0						2						10						16						38



PDI File #: 175607 (46)  
Location: N: State Road S: Bennington Street NE: Unity Avenue  
Location: E: Winthrop Avenue W: Winthrop Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume  
Site Code: 13796.00  
Count Date: Tuesday, May 09, 2017  
Start Time: 3:30 PM  
End Time: 6:30 PM  
Class:



Bicycles (on Roadway and Crosswalks)

	State Road								Unity Avenue								Winthrop Avenue								Bennington Street								Winthrop Avenue								Total	
	North								Northeast								East								South								West									
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total		
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	1	0	1	5
5:15 PM	0	0	0	0	0	0	2	2	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	1	2	3	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3	3	0	0	1	0	0	1	1	3	0	0	0	0	0	1	0	1	11	
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	
Grand Total	0	1	0	0	0	1	2	4	0	0	0	0	0	3	0	3	0	0	0	0	0	1	3	4	0	0	1	0	0	2	1	4	0	0	0	0	0	1	0	1	16	
Approach %	0.0	25.0	0.0	0.0	0.0	25.0	50.0		0.0	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	25.0	75.0		0.0	0.0	25.0	0.0	0.0	50.0	25.0		0.0	0.0	0.0	0.0	0.0	100.0	0.0			
Total %	0.0	6.3	0.0	0.0	0.0	6.3	12.5	25.0	0.0	0.0	0.0	0.0	0.0	18.8	0.0	18.8	0.0	0.0	0.0	0.0	0.0	6.3	18.8	25.0		0.0	0.0	6.3	0.0	0.0	12.5	6.3	25.0		0.0	0.0	0.0	0.0	0.0	6.3	0.0	6.3
Exiting Leg Total	4								3								4								4								1								16	

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

4:30 PM	State Road								Unity Avenue								Winthrop Avenue								Bennington Street								Winthrop Avenue								Total	
	North								Northeast								East								South								West									
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
4:45 PM	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
5:00 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	1	5
5:15 PM	0	0	0	0	0	0	0	2	2	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Total Volume	0	1	0	0	0	0	1	2	4	0	0	0	0	0	2	0	2	0	0	0	0	0	0	3	3	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	1	11
% Approach Total	0.0	25.0	0.0	0.0	0.0	25.0	50.0		0.0	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0	0.0			
PHF	0.000	0.250	0.000	0.000	0.000	0.250	0.250	0.500	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.375	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250		0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.550
Entering Leg	0	1	0	0	0	1	2	4	0	0	0	0	0	2	0	2	0	0	0	0	0	0	3	3	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	1	11	
Exiting Leg	4								2								3								1								1								11	
Total	8								4								6								2								2								22	

PDI File #: 175607 (46)  
Location: N: State Road S: Bennington Street NE: Unity Avenue  
Location: E: Winthrop Avenue W: Winthrop Avenue  
City, State: Revere, MA  
Client: VHB/ A. Berthume  
Site Code: 13796.00  
Count Date: Tuesday, May 09, 2017  
Start Time: 3:30 PM  
End Time: 6:30 PM  
Class:



Pedestrians

	State Road								Unity Avenue								Winthrop Avenue								Bennington Street								Winthrop Avenue								Total
	North								Northeast								East								South								West								
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	31	14	45	0	0	0	0	0	12	17	29	0	0	0	0	0	5	12	17	0	0	0	0	0	6	10	16	0	0	0	0	0	33	27	60	167
3:45 PM	0	0	0	0	0	12	7	19	0	0	0	0	0	10	9	19	0	0	0	0	0	1	5	6	0	0	0	0	0	7	11	18	0	0	0	0	0	17	11	28	90
Total	0	0	0	0	0	43	21	64	0	0	0	0	0	22	26	48	0	0	0	0	0	6	17	23	0	0	0	0	0	13	21	34	0	0	0	0	0	50	38	88	257
4:00 PM	0	0	0	0	0	24	10	34	0	0	0	0	0	14	6	20	0	0	0	0	0	6	5	11	0	0	0	0	0	4	13	17	0	0	0	0	0	24	12	36	118
4:15 PM	0	0	0	0	0	20	13	33	0	0	0	0	0	14	7	21	0	0	0	0	0	3	6	9	0	0	0	0	0	4	13	17	0	0	0	0	0	27	23	50	130
4:30 PM	0	0	0	0	0	24	6	30	0	0	0	0	0	7	15	22	0	0	0	0	0	3	4	7	0	0	0	0	0	9	11	20	0	0	0	0	0	29	10	39	118
4:45 PM	0	0	0	0	0	10	13	23	0	0	0	0	0	4	9	13	0	0	0	0	0	2	3	5	0	0	0	0	0	10	8	18	0	0	0	0	0	15	19	34	93
Total	0	0	0	0	0	78	42	120	0	0	0	0	0	39	37	76	0	0	0	0	0	14	18	32	0	0	0	0	0	27	45	72	0	0	0	0	0	95	64	159	459
5:00 PM	0	0	0	0	0	17	10	27	0	0	0	0	0	10	6	16	0	0	0	0	0	3	2	5	0	0	0	0	0	13	19	32	0	0	0	0	0	37	7	44	124
5:15 PM	0	0	0	0	0	30	12	42	0	0	0	0	0	11	6	17	0	0	0	0	0	6	3	9	0	0	0	0	0	2	18	20	0	0	0	0	0	53	14	67	155
5:30 PM	0	0	0	0	0	14	6	20	0	0	0	0	0	10	9	19	0	0	0	0	0	6	11	17	0	0	0	0	0	4	17	21	0	0	0	0	0	29	6	35	112
5:45 PM	0	0	0	0	0	20	4	24	0	0	0	0	0	8	5	13	0	0	0	0	0	3	3	6	0	0	0	0	0	4	15	19	0	0	0	0	0	29	11	40	102
Total	0	0	0	0	0	81	32	113	0	0	0	0	0	39	26	65	0	0	0	0	0	18	19	37	0	0	0	0	0	23	69	92	0	0	0	0	0	148	38	186	493
6:00 PM	0	0	0	0	0	25	10	35	0	0	0	0	0	8	12	20	0	0	0	0	0	0	8	8	0	0	0	0	0	1	15	16	0	0	0	0	0	31	13	44	123
6:15 PM	0	0	0	0	0	24	6	30	0	0	0	0	0	8	12	20	0	0	0	0	0	5	2	7	0	0	0	0	0	8	18	26	0	0	0	0	0	25	7	32	115
Total	0	0	0	0	0	49	16	65	0	0	0	0	0	16	24	40	0	0	0	0	0	5	10	15	0	0	0	0	0	9	33	42	0	0	0	0	0	56	20	76	238
Grand Total	0	0	0	0	0	251	111	362	0	0	0	0	0	116	113	229	0	0	0	0	0	43	64	107	0	0	0	0	0	72	168	240	0	0	0	0	0	349	160	509	1447
Approach %	0.0	0.0	0.0	0.0	0.0	69.3	30.7		0.0	0.0	0.0	0.0	0.0	50.7	49.3		0.0	0.0	0.0	0.0	0.0	40.2	59.8		0.0	0.0	0.0	0.0	0.0	30.0	70.0		0.0	0.0	0.0	0.0	0.0	68.6	31.4		
Total %	0.0	0.0	0.0	0.0	0.0	17.3	7.7	25.0	0.0	0.0	0.0	0.0	0.0	8.0	7.8	15.8	0.0	0.0	0.0	0.0	0.0	3.0	4.4	7.4	0.0	0.0	0.0	0.0	0.0	5.0	11.6	16.6	0.0	0.0	0.0	0.0	0.0	24.1	11.1	35.2	
Exiting Leg Total	362								229								107								240								509								1447

Peak Hour Analysis from 03:30 PM to 06:30 PM begins at:

3:30 PM	State Road								Unity Avenue								Winthrop Avenue								Bennington Street								Winthrop Avenue								Total
	North								Northeast								East								South								West								
	Right	Thru	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	31	14	45	0	0	0	0	0	12	17	29	0	0	0	0	0	5	12	17	0	0	0	0	0	6	10	16	0	0	0	0	0	33	27	60	167
3:45 PM	0	0	0	0	0	12	7	19	0	0	0	0	0	10	9	19	0	0	0	0	0	1	5	6	0	0	0	0	0	7	11	18	0	0	0	0	0	17	11	28	90
4:00 PM	0	0	0	0	0	24	10	34	0	0	0	0	0	14	6	20	0	0	0	0	0	6	5	11	0	0	0	0	0	4	13	17	0	0	0	0	0	24	12	36	118
4:15 PM	0	0	0	0	0	20	13	33	0	0	0	0	0	14	7	21	0	0	0	0	0	3	6	9	0	0	0	0	0	4	13	17	0	0	0	0	0	27	23	50	130
Total Volume	0	0	0	0	0	87	44	131	0	0	0	0	0	50	39	89	0	0	0	0	0	15	28	43	0	0	0	0	0	21	47	68	0	0	0	0	0	101	73	174	505
% Approach Total	0.0	0.0	0.0	0.0	0.0	66.4	33.6		0.0	0.0	0.0	0.0	0.0	56.2	43.8		0.0	0.0	0.0	0.0	0.0	34.9	65.1		0.0	0.0	0.0	0.0	0.0	30.9	69.1		0.0	0.0	0.0	0.0	0.0	58.0	42.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.702	0.786	0.728	0.000	0.000	0.000	0.000	0.000	0.893	0.574	0.767	0.000	0.000	0.000	0.000	0.000	0.625	0.583	0.632	0.000	0.000	0.000	0.000	0.000	0.750	0.904	0.944	0.000	0.000	0.000	0.000	0.000	0.765	0.676	0.725	0.756
Entering Leg	0	0	0	0	0	87	44	131	0	0	0	0	0	50	39	89	0	0	0	0	0	15	28	43	0	0	0	0	0	21	47	68	0	0	0	0	0	101	73	174	505
Exiting Leg	131								89								43								68								174								505
Total	262								178								86								136								348								1010

## HYM Suffolk Downs

Parking Lot Enter/Exit Counts

location: Revere, MA

project #: 13796.01

date: Thursday, September 28, 2017

26 26 parked cars before 10:30

25 mph on Tomesello Way

34 34 parked past 6:00pm

Time	Parking Lot				Total Enter	Total Exit	Total Parked	Total Vehicles
	Enter		Exiting					
	From North	From South	To North	To South				
10:30 AM	4	1	3	6	5	9	22	14
10:45 AM	7	6	2	1	13	3	32	16
11:00 AM	7	5	5	2	12	7	37	19
11:15 AM	7	5	8	2	12	10	39	22
11:30 AM	13	8	7	2	21	9	51	30
11:45 AM	18	4	5	2	22	7	66	29
12:00 PM	15	4	4	1	19	5	80	24
12:15 PM	8	12	6	4	20	10	90	30
12:30 PM	21	10	8	4	31	12	109	43
12:45 PM	19	8	6	0	27	6	130	33
1:00 PM	13	8	8	1	21	9	142	30
1:15 PM	12	16	3	4	28	7	163	35
1:30 PM	8	10	15	3	18	18	163	36
1:45 PM	5	7	4	1	12	5	170	17
2:00 PM	10	6	13	2	16	15	171	31
2:15 PM	2	9	11	3	11	14	168	25
2:30 PM	9	4	14	4	13	18	163	31
2:45 PM	5	4	7	4	9	11	161	20
3:00 PM	2	4	11	2	6	13	154	19
3:15 PM	6	5	11	2	11	13	152	24
3:30 PM	6	5	13	5	11	18	145	29
3:45 PM	8	3	12	2	11	14	142	25
4:00 PM	6	4	14	0	10	14	138	24
4:15 PM	5	4	11	4	9	15	132	24
4:30 PM	8	2	8	3	10	11	131	21
4:45 PM	3	2	13	2	5	15	121	20
5:00 PM	1	1	10	1	2	11	112	13
5:15 PM	2	3	18	0	5	18	99	23
5:30 PM	4	1	14	4	5	18	86	23
5:45 PM	2	3	45	12	5	57	34	62
					400	392		852

89  
78  
77  
79  
121

## HYM Suffolk Downs

Parking Lot Enter/Exit Counts

location: Revere, MA

project #: 13796.01

date: Thursday, October 05, 2017

23 23 parked cars before 10:30

25 mph on Tomesello Way

4 4 cars in lot past 8:30

Time	Parking Lot				Total Enter	Total Exit	Total Parked	Total Vehicles
	Enter		Exiting					
	From North	From South	To North	To South				
10:30 AM	4	0	4	2	4	6	21	10
10:45 AM	5	2	0	0	7	0	28	7
11:00 AM	11	0	5	0	11	5	34	16
11:15 AM	5	5	3	0	10	3	41	13
11:30 AM	12	7	3	0	19	3	57	22
11:45 AM	15	6	5	1	21	6	72	27
12:00 PM	15	7	5	0	22	5	89	27
12:15 PM	18	13	8	1	31	9	111	40
12:30 PM	20	11	13	3	31	16	126	47
12:45 PM	17	12	8	3	29	11	144	40
1:00 PM	17	10	7	0	27	7	164	34
1:15 PM	19	13	5	3	32	8	188	40
1:30 PM	10	6	16	10	16	26	178	42
1:45 PM	14	7	8	5	21	13	186	34
2:00 PM	5	8	16	3	13	19	180	32
2:15 PM	5	2	15	3	7	18	169	25
2:30 PM	9	8	22	3	17	25	161	42
2:45 PM	10	5	9	4	15	13	163	28
3:00 PM	10	5	15	4	15	19	159	34
3:15 PM	7	3	15	5	10	20	149	30
3:30 PM	7	5	13	3	12	16	145	28
3:45 PM	5	0	13	6	5	19	131	24
4:00 PM	5	2	10	3	7	13	125	20
4:15 PM	3	2	12	1	5	13	117	18
4:30 PM	3	5	12	1	8	13	112	21
4:45 PM	5	5	7	2	10	9	113	19
5:00 PM	3	1	16	2	4	18	99	22
5:15 PM	7	2	6	4	9	10	98	19
5:30 PM	7	2	21	3	9	24	83	33
5:45 PM	2	1	12	4	3	16	70	19
6:00 PM	1	0	2	4	1	6	65	7
6:15 PM	1	1	8	2	2	10	57	12
6:30 PM	2	0	3	2	2	5	54	7
6:45 PM	0	0	8	2	0	10	44	10
7:00 PM	1	0	6	0	1	6	39	7
7:15 PM	0	0	3	1	0	4	35	4
7:30 PM	1	0	5	0	1	5	31	6
7:45 PM	0	0	14	1	0	15	16	15
8:00 PM	1	1	10	3	2	13	5	15
8:15 PM	2	2	1	2	4	3	6	7
					443	460		930

78  
80  
81  
93  
93

# Vehicular Crash Data

Grouped Crash Data from MassDOT Website  
Crash Rate Sheets









**Suffolk Downs Redevelopment Phase 1 Waiver  
American Legion Hwy at Bell Circle (North)**

Crash Number	City/Town	Crash Date	Crash Time	Weekday	Police Agency	RMV Document #	Report ID#	Crash Severity	Number of Vehicles	Number of NonFatal Injuries	Number of Fatal Injuries	Manner of Collision	Road Surface	Ambient Light	Weather Condition	Roadway	Near Intersection Roadway	Distance And Direction From Intersection	Vehicle Travel Directions	Most Harmful Events	Vehicle Action Prior to Crash	Vehicle Configuration	Non Motorist Type
4048612	REVERE	2/18/2015	1:55 AM	3	local police	PR201507100650	15-5446	Non-fatal injury	2	1	0	Sideswipe, same direction	Snow	Dark - lighted roadway	Clear	AMERICAN LEGION HIGHWAY		0	0 V1:N / V2:N	V1 (Collision with motor vehicle in traffic) V2:I	V1: Travelling straight ahead / V2:Travelling straight ahead	V1(Passenger car) V2(Light truck/van, mini-van, panel, pickup, sport utility) with only four tires)	0
4069196	REVERE	5/22/2015	3:57 PM	5	local police	PR201516001332	15-15518-AC	Unknown	2	0	0	Angle	Dry	Daylight	Clear	BEACH STREET	AMERICAN LEGION HIGHWAY	0	0 V1:W / V2:S	V1 (Collision with motor vehicle in traffic) V2(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1(Passenger car) V2(Passenger car)	0
4150487	REVERE	12/17/2015	10:36 PM	4	local police	PR201535800244	15rev-41135-ac	Property damage only (none injured)	3	0	0	Sideswipe, same direction	Wet	Dark - lighted roadway	Rain	BELL CIRCLE	BEACH STREET	0	0 V1:S / V2:E / V3:E	V1 (Collision with motor vehicle in traffic) V2 (Collision with motor vehicle in traffic) V3(Collision with motor vehicle in traffic)	V1: Changing lanes / V2:Entering traffic lane V3:Entering traffic lane	V1(Passenger car) V2(Passenger car) V3(Passenger car)	0
2709631	REVERE	3/6/2011	3:53 AM	7	local police	PR201107500123		Non-fatal injury	2	1	0	Angle	Wet	Dark - lighted roadway	Clear	BELL CIRCLE / AMERICAN LEGION HIGHWAY			V1 (Collision with motor vehicle in traffic) V2 (Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1 (Passenger car) V2(I)		
3244681	REVERE	6/17/2012	3:07 PM	7	local police	PR201218000213		Non-fatal injury	2	2	0	Rear-end	Wet	Daylight	Clear	BELL CIRCLE	BEACH STREET		V1:N / V2:N	V1 (Collision with motor vehicle in traffic) V2 (Collision with motor vehicle in traffic)	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic	V1(Light truck/van, mini-van, panel, pickup, sport utility) with only four tires)	
2723520	REVERE	5/7/2011	7:00 AM	6	local police	PR201113600319		Non-fatal injury	3	1	0	Rear-end	Dry	Daylight	Clear/Clear	Rte 1A / BELL CIRCLE			V1:8 / V2:8 / V3:8	V1 (Unknown) V2:(Unknown) V3:(Unknown)	V1: Unknown / V2:Unknown / V3:Unknown	V1(Passenger car) V2(Light truck/van, mini-van, panel, pickup, sport utility) with only four tires) V2 (Light truck/van, mini-van, panel, pickup, sport utility) with only four tires) V3(Passenger car)	
3007893	REVERE	2/29/2012	8:50 AM	3	local police	PR201206800121		Property damage only (none injured)	2	0	0	Rear-end	Wet	Dark - lighted roadway	Rain/Snow	BEACH STREET	BELL CIRCLE		V1:W / V2:W	V1 (Collision with motor vehicle in traffic) V2(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1(Passenger car) V2(Passenger car)	
2879756	REVERE	1/8/2012	11:00 AM	7	local police	PR201202500609		Non-fatal injury	2	4	0	Angle	Dry	Daylight	Clear	AMERICAN LEGION HIGHWAY / BELL CIRCLE			V1 (Collision with motor vehicle in traffic) V2 (Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Turning right	V1(Tractor/semi-trailer) V2(Passenger car)		
2732450	REVERE	6/13/2011	2:40 PM	1	local police	PR201116500432		Not Reported	2	0	0	Angle	Dry	Daylight	Clear	BELL CIRCLE Rte 1A S			V1 (Collision with motor vehicle in traffic) V2 (Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1(Unknown heavy truck, cannot classify) V2(Passenger car)		
3731463	REVERE	10/10/2013	2:43 PM	4	local police	PR201332300135	13-28450-ac	Non-fatal injury	2	1	0	Angle	Dry	Daylight	Cloudy	BELL CIRCLE / BEACH STREET / BEACH STREET / AMERICAN LEGION HIGHWAY			V1 (Collision with motor vehicle in traffic) V2(Collision with motor vehicle in traffic)	V1: Backing / V2:Slowing or stopped in traffic	V1(Bus (seats for 7-15 people, including driver)) V2(Motorcycle)		
2789221	REVERE	10/18/2011	11:30 AM	2	local police	PR2011229900750		Property damage only (none injured)	2	0	0	Sideswipe, same direction	Wet	Daylight	Rain				V1:E / V2:8	V1(I) V2(I)	V1: Not reported / V2:Not reported	V1(I) V2(I)	
2790145	REVERE	10/20/2011	6:20 AM	4	local police	PR201130000119		Property damage only (none injured)	2	0	0	Angle	Wet	Dark - lighted roadway	Cloudy	BELL CIRCLE / AMERICAN LEGION HIGHWAY			V1 (Collision with motor vehicle in traffic) V2 (Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1 (Passenger car) V2(Passenger car)		
2739383	REVERE	6/18/2011	9:45 PM	6	local police	PR201118700148		Property damage only (none injured)	3	0	0	Rear-end	Dry	Dark - lighted roadway	Clear	AMERICAN LEGION HIGHWAY Rte 60 S / BELL CIRCLE			V1 (Collision with motor vehicle in traffic) V2 (Collision with motor vehicle in traffic) V3(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead / V3:Travelling straight ahead	V1(Passenger car) V2(Passenger car) V3(Passenger car)		
2741388	REVERE	7/2/2011	1:27 PM	6	local police	PR201119401206		Property damage only (none injured)	2	0	0	Sideswipe, same direction	Dry	Daylight	Clear/Cloudy	BELL CIRCLE Rte 1A N / AMERICAN LEGION HIGHWAY			V1 (Collision with motor vehicle in traffic) V2 (Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1(I) V2(I)		
2742750	REVERE	7/7/2011	12:00 PM	4	local police	PR201120000409		Property damage only (none injured)	2	0	0	Angle	Dry	Dark - lighted roadway	Clear	BELL CIRCLE / BEACH STREET / AMERICAN LEGION HIGHWAY			V1 (Collision with motor vehicle in traffic) V2 (Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1(Passenger car) V2(Light truck/van, mini-van, panel, pickup, sport utility) with only four tires)		
3064744	REVERE	4/8/2012	1:54 AM	7	local police	PR201210100731		Non-fatal injury	2	4	0	Angle	Dry	Dark - lighted roadway	Clear	BELL CIRCLE Rte 1A N / BEACH STREET			V1 (Collision with motor vehicle in traffic) V2 (Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1(Passenger car) V2(Passenger car)		
339																							

**Suffolk Downs Redevelopment Phase 1 Waiver  
American Legion Hwy at Bell Circle (South)**

Crash Number	City/Town	Crash Date	Crash Time	Weekday	Police Agency	RMV Document #	Report ID#	Crash Severity	Number of Vehicles	Number of Nonfatal Injuries	Number of Fatal Injuries	Manner of Collision	Road Surface	Ambient Light	Weather Condition	Roadway	Near Intersection Roadway	Distance And Direction From Intersection	Vehicle Travel Directions	Most Harmful Events	Vehicle Action Prior to Crash	Vehicle Configuration	Non Motorist Type
4097711	REVERE	9/28/2015	7:00 AM	1	MBTA police	PR201528700123	2015-10362 / 2015-10362	Non-fatal injury	2	3	0	Rear-end	Dry	Daylight	Clear/Clear	LEE BURBANK HIGHWAY	BELL CIRCLE	300 feet S of	V1:8 / V2:8	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Bus (seats for more than 15 people, including driver)) V2:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires)	0
4011095	REVERE	3/5/2015	9:43 AM	1	Local police	PR201502200139	15rev-413-ac	Property damage only (none injured)	2	0	0	Rear-end	Dry	Daylight	Clear	BELL CIRCLE		0	V1:N / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:(Passenger car) V2:(Passenger car)	0
4011296	REVERE	1/1/2015	11:01 PM	4	Local police	PR201503500607	15rev-96-ac	Non-fatal injury	3	3	0	Rear-end	Dry	Dark - lighted roadway	Clear	BELL CIRCLE		0	V1:N / V2:N / V3:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with parked motor vehicle)	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic / V3:Travelling straight ahead	V1:(Passenger car) V2:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires) V3:(Unknown vehicle configuration)	0
4020212	REVERE	2/27/2015	2:45 PM	5	Local police	PA201503700142 / PR201506800348	15rev-6514-ac / 15rev-6514-ac	Non-fatal injury	2	2	0	Angle	Wet	Daylight	Clear	BELL CIRCLE		0	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic	V1:(Passenger car) V2:(Unknown heavy truck, cannot classify)	0
4069672	REVERE	5/30/2015	4:40 PM	6	Local police	PR201516000631	15-16498-ac	Property damage only (none injured)	2	0	0	Rear-end	Dry	Daylight	Clear	BELL CIRCLE		0	V1:E / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:(Passenger car) V2:(Passenger car)	0
4124078	REVERE	10/18/2015	11:28 AM	7	Local police	PR201529500133	15REV-34002-AC / 15REV-34002-AC / 15REV-34002-AC / 15REV-34003-AC / 15REV-34002-AC / 15REV-34002-AC / 15REV-34	Non-fatal injury	1	1	0	Single vehicle crash	Dry	Daylight	Clear	BELL CIRCLE		0	V1:N	V1:(Other)	V1: Travelling straight ahead	V1:(Motorcycle)	0
2706817	REVERE	2/12/2011	9:18 PM	6	Local police	PR201105900146		Not Reported	2	0	0	Angle	Dry	Dark - lighted roadway	Clear	BELL CIRCLE			V1:N / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires) V2:(Passenger car)	
2704259	REVERE	1/28/2011	8:00 PM	5	Local police	PR201103800148		Non-fatal injury	2	2	0	Angle	Dry	Dark - lighted roadway	Clear	BELL CIRCLE			V1:5 / V2:W	V1: Travelling straight ahead / V2:Travelling straight ahead	V1: Travelling straight ahead	V1:(Passenger car) V2:(Passenger car)	
2702434	REVERE	2/8/2011	10:35 PM	2	Local police	PR201104601187		Not Reported	2	0	0	Angle	Wet	Daylight	Rain	BELL CIRCLE			V1:8 / V2:8	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Passenger car) V2:(Passenger car)	
2714896	REVERE	3/19/2011	2:40 PM	6	Local police	PR201108300345		Non-fatal injury	2	1	0	Rear-end	Dry	Daylight	Clear	LEE BURBANK HIGHWAY	EVERETT STREET		V1:1 / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires) V2:(Passenger car)	
2951331	REVERE	12/3/2011	9:20 AM	6	Local police	PR201134800528		Property damage only (none injured)	2	0	0	Angle	Dry	Daylight	Cloudy	BELL CIRCLE			V1:5 / V2:8	V1:(Collision with motor vehicle in traffic) V2:1	V1: Turning right / V2:Turning right	V1:(Truck tractor (bobtail)) V2:(Passenger car)	
2723519	REVERE	5/3/2011	11:45 AM	2	Local police	PR201113600318		Property damage only (none injured)	2	0	0	Angle	Dry	Daylight	Clear	BELL CIRCLE			V1:8 / V2:8	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Leaving traffic lane / V2:Travelling straight ahead	V1:(Passenger car) V2:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires)	
356014	REVERE	8/5/2013	6:07 AM	1	Local police	PR201327200414	13-21304-ac	Property damage only (none injured)	2	0	0	Sideswipe, same direction	Dry	Daylight	Clear	BELL CIRCLE			V1:5 / V2:5	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires) V2:(Passenger car)	
3509935	REVERE	7/4/2013	12:43 PM	4	Local police	PR201319100105	13-17897-AC	Non-fatal injury	2	1	0	Rear-end	Dry	Daylight	Clear	BELL CIRCLE Rte 16 N / Rte 16			V1:N / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic	V1:(Passenger car) V2:(Passenger car)	
3285537	REVERE	9/17/2012	5:05 PM	1	Local police	PR201227100606		Property damage only (none injured)	2	0	0	Rear-end	Dry	Daylight	Clear	BELL CIRCLE			V1:5 / V2:5	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:(Passenger car) V2:(Passenger car)	
2728450	REVERE	5/26/2011	5:30 PM	4	Local police	PR201115300130		Non-fatal injury	2	1	0	Rear-end	Dry	Daylight	Clear	BELL CIRCLE			V1:8 / V2:8	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires) V2:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires)	
3563557	REVERE	8/17/2013	7:46 AM	6	Local police	PR201322700335	13-22590-ac	Unknown	2	0	0	Angle	Dry	Daylight	Clear/Other	BELL CIRCLE			V1:N / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Passenger car) V2:(Passenger car)	
3012068	REVERE	4/12/2012	7:41 AM	4	Local police	PR201207300231		Property damage only (none injured)	2	0	0	Angle	Dry	Daylight	Rain	BELL CIRCLE			V1:5 / V2:5	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Turning right / V2:Turning right	V1:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires) V2:(Unknown heavy truck, cannot classify)	
3663071	REVERE	10/30/2013	12:26 AM	3	Local police	PR201330901528	13-30380-AC	Non-fatal injury	2	1	0	Sideswipe, opposite direction	Dry	Dark - lighted roadway	Clear	BELL CIRCLE			V1:W / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Passenger car) V2:(Passenger car)	
3380583	REVERE	3/23/2013	1:48 AM	6	Local police	PR201308700508	13-7324-AC	Property damage only (none injured)	2	0	0	Sideswipe, same direction	Dry	Dark - lighted roadway	Clear/Other	BELL CIRCLE			V1:N / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with other movable object)	V1: Travelling straight ahead / V2:Changing lanes	V1:(Truck/trailer) V2:(Passenger car)	
3595654	REVERE	9/18/2013	11:25 AM	3	Local police	PR201326900416	13-25993-AC	Property damage only (none injured)	2	0	0	Rear-end	Dry	Daylight	Clear	BELL CIRCLE			V1:N / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:(Passenger car) V2:(Passenger car)	
3264970	REVERE	9/17/2012	8:12 AM	1	Local police	PR201225500345		Property damage only (none injured)	2	0	0	Angle	Dry	Daylight	Clear	BELL CIRCLE			V1:5 / V2:5	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Changing or more lanes	V1:(Passenger car) V2:(Single-unit truck (3-or-more axles))	
3475234	REVERE	6/7/2013	12:30 PM	5	Local police	PR201316400740	13-15070-AC	Property damage only (none injured)	2	0	0	Angle	Wet	Daylight	Cloudy/Rain	BELL CIRCLE			V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires) V2:(Tractor/semi-trailer)	
3419238	REVERE	5/6/2013	1:05 PM	1	Local police	PR201313501104	13-11625-AC	Non-fatal injury	4	3	0	Rear-end	Dry	Daylight	Clear	BELL CIRCLE			V1:N / V2:N / V3:N / V4:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with motor vehicle in traffic) V4:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Slowing or stopped in traffic / V3:Slowing or stopped in traffic / V4:Slowing or stopped in traffic	V1:(Truck/trailer) V2:(Truck/trailer) V3:(Passenger car) V4:(Passenger car)	
3211373	REVERE	6/2/2012	4:07 PM	6	Local police	PR201215800224		Property damage only (none injured)	3	0	0	Rear-end	Wet	Daylight	Rain	BELL CIRCLE Rte 16 N			V1:N / V2:N / V3:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead / V3:Travelling straight ahead	V1:(Passenger car) V2:(Passenger car) V3:(Passenger car)	
2751984	REVERE	8/3/2011	3:00 PM	3	Local police	PR201122800718		Property damage only (none injured)	2	0	0	Angle	Dry	Daylight	Clear	BELL CIRCLE			V1:8 / V2:8	V1:(Collision with motor vehicle in traffic) V2:1	V1: Other / V2:Other	V1:(Bus (seats for 7-15 people, including driver)) V2:(Truck/trailer)	
3319530	REVERE	12/14/2012	2:34 PM	5	Local police	PR201235300636		Unknown	3	0	0	Rear-end	Dry	Daylight	Clear	BELL CIRCLE Rte 60 N			V1:N / V2:N / V3:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with motor vehicle in traffic)	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic / V3:Slowing or stopped in traffic	V1:(Passenger car) V2:(Passenger car) V3:(Passenger car)	
3783053	REVERE	3/25/2014	11:46 AM	2	Local police	PR201403500437	14-8141-ac	Property damage only (none injured)	1	0	0	Angle	Dry	Daylight	Cloudy	BELL CIRCLE			V1:5	V1:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead	V1:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires)	
3806158	REVERE	2/14/2014	11:46 AM	5	Local police	PR201405200503	14-4412-ac	Property damage only (none injured)	2	0	0	Angle	Wet	Daylight	Cloudy	BELL CIRCLE			V1:8 / V2:8	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Passenger car) V2:(Passenger car)	
3792168	REVERE	3/13/2014	9:29 AM	4	Local police	PR201407900409	14-6945-ac	Property damage only (none injured)	2	0	0	Angle	Snow	Daylight	Snow/Cloudy	BELL CIRCLE			V1:5 / V2:5	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Other / V2:Other	V1:(Passenger car) V2:(Passenger car)	
3880361	REVERE	7/4/2014	2:45 PM	5	Local police	PR201419000349	14-19102-AC	Non-fatal injury	2	2	0	Angle	Wet	Daylight	Rain	BELL CIRCLE			V1:W / V2:5	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Passenger car) V2:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires)	
3898758	REVERE	7/25/2014	9:29 AM	5	Local police	PR201421700115	14-21465-ac	Non-fatal injury	2	1	0	Angle	Dry	Daylight	Clear	BELL CIRCLE			V1:5 / V2:5	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Turning left / V2:Travelling straight ahead	V1:(Passenger car) V2:(Passenger car)	
3949783	REVERE	9/4/2014	6:15 PM	4	Local police	PR201425400324	14-26563-AC	Property damage only (none injured)	2	0	0	Angle	Dry	Daylight	Clear	BELL CIRCLE			V1:8 / V2:8	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Light truck/van, mini-van, panel, pickup, sport utility with only four tires) V2:(Passenger car)	
SELECT [Crash Number], [City/Town], [Crash Date], [Crash Time], [RMV Document #], [Report ID#], [Crash Severity], [Number of Vehicles], [Number of Nonfatal Injuries], [Number of Fatal Injuries], [Manner of Collision], [Road Surface], [Ambient Light], [Weather Condition], [Roadway], [Near Intersection Roadway], [Distance And Direction From Intersection], [Vehicle Travel Directions], [Most Harmful Events], [Vehicle Action Prior to Crash], [Vehicle Configuration], [Non Motorist Type], [DEPT FROM TRUCK CRASH REPORT VIEW] WHERE ([Crash Date] >= '2010-01-01' AND [Crash Date] <= '2014-12-31')																							
This query was also restricted by a map filter.																							

## Suffolk Downs Redevelopment Phase 1 Waiver Route 16 at Bell Circle

[illegible]

## Suffolk Downs Redevelopment Phase 1 Waiver VFW Hwy at Bell Circle

[illegible]

## Suffolk Downs Redevelopment Phase 1 Waiver Beach Street at Bell Circle

Crash Number	Crash Date	Crash Time	Weekday	City/Town	Locality	Crash Severity	Number of Nonfatal Injuries	Number of Fatal Injuries	Manner of Collision	Vehicle Action Prior to Crash	Vehicle Travel Directions	Most Harmful Events	Vehicle Configuration	Non Motorist Type	Road Surface	Ambient Light	Weather Condition	Roadway	Distance And Direction From Intersection	Police Agency	RMV Document #	Report IDs	Roadway Contributing Code
3289597	9/30/2012	2:10 AM	Sun	REVERE	REVERE	Non-fatal injury	1	0	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:S / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Cloudy	BELL CIRCLE		Local police	PR201228500241		Not reported
3549267	7/21/2013	2:51 AM	Sun	REVERE	REVERE	Property damage only (none injured)	0	0	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:N / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Clear	BELL CIRCLE / BEACH STREET		Local police	PR201321100247	13-19710-AC	Not reported
3713972	11/16/2013	3:13 PM	Sat	REVERE	REVERE	Non-fatal injury	1	0	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:W / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Clear/Cloudy	BEACH STREET / JOHN MOONEY ROAD		Local police	PR201332400522	13-32211-ac	Not reported
3731463	10/10/2013	2:43 PM	Thu	REVERE	REVERE	Non-fatal injury	1	0	Angle	V1: Backing / V2:Slowing or stopped in traffic	V1:S / V2:S	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Bus (seats for 7-15 people, including driver)) V2:(Motorcycle)		Dry	Daylight	Cloudy	BELL CIRCLE / BEACH STREET /		Local police	PR201332300135	13-28450-ac	Not reported
2742750	7/7/2011	12:00 PM	Thu	REVERE	REVERE	Property damage only (none injured)	0	0	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:W / V2:S	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Dark - lighted roadway	Clear	BELL CIRCLE / BEACH STREET / AMERICAN LEGION HIGHWAY		Local police	PR201120000409		Not reported
3244681	6/17/2012	3:07 PM	Sun	REVERE	REVERE	Non-fatal injury	2	0	Rear-end	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic	V1:N / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Wet	Daylight	Clear	BELL CIRCLE		Local police	PR201218000213		Not reported
3560151	7/31/2013	3:19 PM	Wed	REVERE	REVERE	Property damage only (none injured)	0	0	Not reported	V1: Unknown / V2:Unknown	V1:S / V2:S	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Motorcycle) V2:(Unknown vehicle configuration)		Not reported	Not reported	Not Reported	BELL CIRCLE		Local police	PR201322700419	13-20848-AC	Not reported
3602060	9/26/2013	8:45 AM	Thu	REVERE	REVERE	Property damage only (none injured)	0	0	Angle	V1: Entering traffic lane / V2:Travelling straight ahead	V1:E / V2:S	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Tractor/semi-trailer)		Dry	Daylight	Clear	BELL CIRCLE		Local police	PR201326900122	13-26905-AC	Not reported
3007893	2/29/2012	8:50 AM	Wed	REVERE	REVERE	Property damage only (none injured)	0	0	Rear-end	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Wet	Dark - lighted roadway	Rain/Snow	BEACH STREET		Local police	PR201206800121		Not reported
3064744	4/8/2012	1:54 AM	Sun	REVERE	REVERE	Non-fatal injury	4	0	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:N / V2:S	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Clear	BELL CIRCLE Rte 1A N / BEACH STREET		Local police	PR201210100731		Not reported
3645443	10/30/2013	9:54 AM	Wed	REVERE	REVERE	Property damage only (none injured)	0	0	Angle	V1: Other / V2:Turning right	V1:N / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Tractor/semi-trailer)		Wet	Daylight	Cloudy/Rain	BEACH STREET / BELL CIRCLE Rte 1A S		Local police	PR201330900913	13-30405-ac	Not reported
3910370	8/14/2014	5:29 PM	Thu	REVERE	REVERE	Non-fatal injury	1	0	Rear-end	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic / V3:Travelling straight ahead	V1:E / V2:E / V3:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car) V3:(Single-unit truck (2-axle, 6-tire))		Dry	Daylight	Clear	BELL CIRCLE / Rte 60 E / BEACH STREET		Local police	PR201423000915	14-24144-ac	None
3797686	2/27/2014	6:37 AM	Thu	REVERE	REVERE	Property damage only (none injured)	0	0	Sideswipe, same direction	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:N / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Tractor/semi-trailer) V2:(Passenger car) V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Cloudy	BELL CIRCLE Rte 1A N / BEACH STREET Rte 1A N / BELL CIRCLE		Local police	PR201407800844	14-5601-ac	Unknown
3835933	3/10/2014	1:48 PM	Mon	REVERE	REVERE	Property damage only (none injured)	0	0	Angle	V1: Other / V2:Other	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Tractor/semi-trailer) V2:(Passenger car) V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Cloudy	MAHONEY CIRCLE / LEE BURBANK HIGHWAY Rte 1A S		Local police	PR201407800637	14-6680-ac	None
3849334	6/10/2014	8:52 AM	Tue	REVERE	REVERE	Property damage only (none injured)	0	0	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:S / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Tractor/semi-trailer) V2:(Passenger car)		Dry	Daylight	Clear	BELL CIRCLE / BEACH STREET		Local police	PR201416100444	14-16244-ac	None

Suffolk Downs Redevelopment Phase 1 Waiver  
Winthrop Avenue at Revere Beach Pkwy/Harris Street

Crash Number	Crash Date	Crash Time	Weekday	City/Town	Crash Severity	Number of NonFatal Injuries	Number of Fatal Injuries	Number of Vehicles	Manner of Collision	Vehicle Action Prior to Crash	Vehicle Travel Directions	Most Harmful Events	Vehicle Configuration	Non Motorist Type	Road Surface	Ambient Light	Weather Condition	Roadway	Distance And Direction From Intersection	Police Agency	RMV Document #	Report IDs
4042521	5/6/2015	7:50 AM		3 REVERE	Non-fatal injury	1	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic	V1:E / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		0 Dry	Daylight	Clear	REVERE BEACH PARKWAY Rte 16 E		0 State police	PW201513900342	2015-045-002936
4044999	5/19/2015	10:40 AM		2 REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		0 Wet	Daylight	Rain	RAMP-RT 1A SB TO RT 16 WB Rte 16 W		0 State police	PW201514700306	2015-045-003373
4014350	2/26/2015	9:10 PM		4 REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:E / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		0 Dry	Dark - lighted roadway	Clear	REVERE BEACH PARKWAY Rte SR16 E		0 State police	PW201506101508	2015-045-001256 / 2015-045-001256
4078746	8/2/2015	4:45 PM		7 REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:N / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		0 Dry	Daylight	Clear	REVERE BEACH PARKWAY		0 State police	PW201524300333	2015-045-005736
4081233	8/21/2015	4:35 PM		5 REVERE	Property damage only (none injured)	0	0	3	Rear-end	V1: Travelling straight ahead / V2:Slowing or stopped in traffic / V3:Slowing or stopped in traffic	V1:E / V2:E / V3:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V3:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		0 Dry	Daylight	Clear	REVERE BEACH PARKWAY		0 State police	PW201525000173	2015-045-006276 / 2015-045-006276
4088466	9/20/2015	11:31 AM		7 REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Turning left / V2:Travelling straight ahead	V1:8 / V2:8	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		0 Dry	Daylight	Clear	WINTHROP AVENUE		0 Local police	PR201521100249	15rev-30545-ac
4061437	5/30/2015	6:32 AM		6 REVERE	Non-fatal injury	1	0	1	Single vehicle crash	V1: Other	V1:8	V1:()	V1:(Unknown heavy truck, cannot classify)		0 Dry	Daylight	Clear	REVERE BEACH PARKWAY		0 State police	PW201519400841	2015-045-003729
4090594	9/27/2015	2:41 AM		7 REVERE	Non-fatal injury	1	0	2	Angle	V1: Travelling straight ahead / V2:Turning left	V1:E / V2:S	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger car)		0 Dry	Dark - lighted roadway	Clear	REVERE BEACH PARKWAY		0 State police	PW201527400172	2015-045-007129
4111985	11/15/2015	1:58 AM		7 REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Changing lanes	V1:E / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:()		0 Dry	Dark - lighted roadway	Clear	REVERE BEACH PARKWAY Rte 16 E		0 State police	PW201532300565	2015-045-008206 / 2015-045-008206
4111986	11/18/2015	4:24 PM		3 REVERE	Non-fatal injury	1	0	1	Single vehicle crash	V1: Travelling straight ahead	V1:W	V1:(Collision with pedestrian)	V1:(Passenger car)	P2 Pedestrian	Dry	Dark - lighted roadway	Clear	RAMP-RT 1A SB TO RT 16 WB Rte 16 W		0 State police	PW201532300566	2015-045-008271
4133051	12/21/2015	5:21 AM		1 REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:N / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger car)		0 Dry	Dark - lighted roadway	Clear	REVERE BEACH PARKWAY / REVERE BEACH PARKWAY		0 State police	PW201601200476	2015-045-008942
2689456	1/31/2011	6:30 PM		1 REVERE	Non-fatal injury	3	0	3	Head-on	V1: Travelling straight ahead / V2:Turning left / V3:Travelling straight ahead	V1:N / V2:E / V3:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V3:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Wet	Dark - lighted roadway	Clear	HARRIS STREET / REVERE BEACH PARKWAY / WINTHROP AVENUE Rte 16		State police	PW201104501713	2011-045-000475
2701726	2/19/2011	6:42 AM		6 REVERE	Non-fatal injury	1	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:E / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Single-unit truck (3-or-more axles)) V2:(Passenger car)		Dry	Daylight	Not Reported	/ RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16		State police	PW201106800707	2011-045-000840
2709474	3/23/2011	11:50 AM		3 REVERE	Non-fatal injury	1	0	2	Rear-end	V1: Backing / V2:Slowing or stopped in traffic	V1:8 / V2:8	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Single-unit truck (2-axle, 6-tire)) V2:(Passenger car)		Dry	Daylight	Clear	HARRIS STREET / REVERE BEACH PARKWAY		Local police	PR201108700320	
2741239	6/2/2011	7:12 PM		4 REVERE	Non-fatal injury	1	0	2	Rear-end	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:N / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Clear	REVERE BEACH PARKWAY Rte 16 E / WINTHROP AVENUE		State police	PW201119900109	2011-045-002907
2737465	6/10/2011	4:00 PM		5 REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Making U-turn	V1:8 / V2:8	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger car)		Dry	Daylight	Clear	HARRIS STREET		Local police	PR201117300449	
3372640	9/28/2011	9:55 PM		3 REVERE	Non-fatal injury	2	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:N / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Dark - lighted roadway	Not Reported	HARRIS STREET / WINTHROP AVENUE		State police	PW201308400907	2011-045-005989
2853094	1/1/2012	8:18 AM		7 REVERE	Not Reported	0	0	1	Single vehicle crash	V1: Not reported	V1:E	V1:(Other)	V1:(Passenger car)		Wet	Daylight	Clear	REVERE BEACH PARKWAY Rte 16 E		State police	PW201200900809	2012-045-000005
3163042	1/28/2012	3:45 PM		6 REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:W / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Clear	HARRIS STREET / WINTHROP AVENUE / REVERE BEACH PARKWAY		State police	PW201219101004	2012-045-000730
2916132	2/18/2012	12:49 AM		6 REVERE	Non-fatal injury	1	0	1	Single vehicle crash	V1: Turning right	V1:E	V1:(Collision with highway traffic sign post)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Dark - lighted roadway	Clear	REVERE BEACH PARKWAY Rte 145 E		State police	PW201205300220	2012-045-001315
3376941	9/1/2012	3:30 PM		6 REVERE	Property damage only (none injured)	0	0	3	Rear-end	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic / V3:Travelling straight ahead	V1:E / V2:E / V3:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V3:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Clear	REVERE BEACH PARKWAY Rte 16 E		State police	PW201309100515	2012-045-010116
3250384	9/3/2012	9:28 PM		1 REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:N / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Clear	REVERE BEACH PARKWAY		State police	PW201225500221	2012-045-010249
3286149	10/26/2012	10:55 PM		5 REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Turning left / V2:Travelling straight ahead	V1:E / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Not Reported	Rte 16 W / WINTHROP AVENUE /		State police	PW201231000607	2012-045-012365
3324577	12/29/2012	12:50 AM		6 REVERE	Property damage only (none injured)	0	0	1	Single vehicle crash	V1: Turning right	V1:E	V1:(Collision with light pole or other post/support)	V1:(Passenger car)		Dry	Dark - lighted roadway	Cloudy	RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16 E		State police	PW201300304105	2012-045-014419
3336839	12/29/2012	10:15 PM		6 REVERE	Property damage only (none injured)	0	0	3	Sideswipe, same direction	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic / V3:Slowing or stopped in traffic	V1:E / V2:E / V3:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car) V3:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Snow	Dark - lighted roadway	Snow/Blowing sand, snow	RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16 E		State police	PW201301500113	2012-045-014441
3359831	2/10/2013	5:25 PM		7 REVERE	Property damage only (none injured)	0	0	2	Sideswipe, same direction	V1: Turning left / V2:Turning left	V1:W / V2:W	V1:(Collision with other movable object) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Truck/trailer)		Dry	Dark - lighted roadway	Clear/Snow	RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16		State police	PW201305600214	2013-045-001273
3368547	3/13/2013	3:13 PM		3 REVERE	Non-fatal injury	1	0	2	Rear-end	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:E / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Clear	RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16 E		State police	PW201307400511	2013-045-002288
3373755	3/15/2013	1:35 PM		5 REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:W / V2:S	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Not Reported	RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16		State police	PW201308501305	2013-045-002356
3430454	5/25/2013	1:02 AM		6 REVERE	Not Reported	0	0	1	Single vehicle crash	V1: Travelling straight ahead	V1:N	V1:(Collision with median barrier)	V1:(Passenger car)		Wet	Dark - lighted roadway	Cloudy/Rain	RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16 E		State police	PW201315100131	2013-045-004574
3543859	7/23/2013	12:05 AM		2 REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:E / V2:S	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Cloudy	Rte 16 E		State police	PW201321300130	2013-045-007458
3562309	8/19/2013	5:40 PM		1 REVERE	Property damage only (none injured)	0	0	3	Rear-end	V1: Not reported / V2:Not reported / V3:Not reported	V1:8 / V2:8 / V3:8	V1:() V2:() V3:()	V1:(Passenger car) V2:(Passenger car) V3:(Passenger car)		Dry	Daylight	Cloudy	RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16 W		State police	PW201323400304	2013-045-008716
3611438	10/16/2013	5:20 PM		3 REVERE	Non-fatal injury	2	0	2	Rear-end	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:E / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Dusk	Cloudy	RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16		State police	PW201329600205	2013-045-010400
3655070	10/27/2013	2:19 AM		7 REVERE	Non-fatal injury	1	0	2	Rear-end	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Clear	HARRIS STREET / REVERE BEACH PARKWAY		Local police	PR201330300524	13-30112-AC
3664862	11/12/2013	8:35 AM		2 REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Turning left	V1:W / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Cloudy	RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16		State police	PW201333701008	2013-045-011014
3819731	2/6/2014	6:20 PM		4 REVERE	Non-fatal injury	2	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:W / V2:S	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Dark - lighted roadway	Clear	WINTHROP AVENUE / REVERE BEACH PARKWAY Rte 16 W		Local police	PR201405800529	14-3680-ac
3772277	3/6/2014	10:17 AM		4 REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Clear	RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16 W		State police	PW201408400526	2014-045-001718
3772290	3/20/2014	5:05 PM		4 REVERE	Non-fatal injury	1	0	2	Angle	V1: Travelling straight ahead / V2:Turning left	V1:W / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Clear	RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16 W		State police	PW201408400535	2014-045-002060
3868064	6/18/2014	9:22 PM		3 REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:E / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Dark - lighted roadway	Clear	REVERE BEACH PARKWAY Rte 16 E		State police	PW201418300120	2014-045-004384
3863279	6/20/2014	11:40 AM		5 REVERE	Non-fatal injury	1	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Clear	RAMP - BURBANK HWY TO REVERE BEACH PKWY Rte 16 W		State police	PW201417600512	2014-045-004425



Suffolk Downs Redevelopment Phase 1 Waiver  
North Shore Road at Winthrop Avenue

Crash Number	Crash Date	Crash Time	Weekday	City/Town	Crash Severity	Number of Nonfatal Injuries	Number of Fatal Injuries	Number of Vehicles	Manner of Collision	Vehicle Action Prior to Crash	Vehicle Travel Directions	Most Harmful Events	Vehicle Configuration	Non Motorist Type	Road Surface	Ambient Light	Weather Condition	Roadway	Distance And Direction From Intersection	Police Agency	RMV Document #	Report IDs				
4099404	10/19/2015	5:25 PM		1	REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		0	Dry	Daylight	Clear		NORTH SHORE ROAD / REVERE BEACH PARKWAY Rte SR145 N		0	State police	PW201529600177	2015-0A5-007587
4031960	4/3/2015	10:30 PM		5	REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		0	Wet	Dark - lighted roadway	Rain		REVERE BEACH PARKWAY Rte 145 N		0	State police	PW201510500307	2015-0A5-002123
3995877	1/9/2015	7:04 PM		5	REVERE	Non-fatal injury	1	0	2	Sideswipe, same direction	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:N / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		0	Dry	Dark - lighted roadway	Clear		REVERE BEACH PARKWAY Rte 145 E		0	State police	PW201502001307	2015-0A5-000192
4000888	1/24/2015	12:02 AM		6	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Turning left	V1:W / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		0	Dry	Dark - lighted roadway	Clear		NORTH SHORE ROAD / REVERE BEACH PARKWAY Rte SR145 N		0	State police	PW201503300703	2015-0A5-000510
4012494	2/14/2015	3:05 AM		6	REVERE	Property damage only (none injured)	0	0	2	Sideswipe, opposite direction	V1: Turning left / V2:Travelling straight ahead	V1:E / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		0	Dry	Dark - lighted roadway	Not Reported	/ Rte 145		0	State police	PW201505600705	2015-0A5-000967	
4059104	6/16/2015	12:30 PM		2	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Turning left / V2:Travelling straight ahead	V1:N / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V2:(Passenger car)	P3-Other non-motorist (wheelchair, etc.)	Dry	Daylight	Clear			NORTH SHORE ROAD / REVERE BEACH PARKWAY Rte SR145 N		0	State police	PW201519400908	2015-0A5-004283
2701725	2/18/2011	7:47 PM		5	REVERE	Non-fatal injury	3	0	3	Rear-end	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:E / V2:E / V3:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car) V3:(Passenger car)			Wet	Dark - lighted roadway	Cloudy		Rte 145			State police	PW201106800706	2011-0A5-000813
2725710	5/19/2011	7:50 PM		4	REVERE	Not Reported	0	0	2	Rear-end	V1: Not reported / V2:Not reported	V1:S / V2:8	V1:[] V2:[]	V1:[] V2:[] (Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)			Unknown	Unknown	Clear		NORTHSHORE ROAD / REVERE BEACH PARKWAY			Local police	PR201114500409	
2731101	6/10/2011	11:25 AM		5	REVERE	Non-fatal injury	1	0	2	Angle	V1: Changing lanes / V2:Travelling straight ahead	V1:E / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Clear			REVERE BEACH PARKWAY			State police	PW201116400117	2011-0A5-003085
2802130	11/21/2011	5:30 PM		1	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Turning left / V2:Travelling straight ahead	V1:N / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger car)		Dry	Dark - lighted roadway	Clear			REVERE BEACH PARKWAY Rte 145 N / NORTHSHORE ROAD			State police	PW201132700201	2011-0A5-007174
2829481	12/11/2011	2:10 AM		7	REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Dark - lighted roadway	Clear			Rte 145 W / NORTHSHORE ROAD			State police	PW201134800208	2011-0A5-007562
2839527	12/23/2011	12:10 PM		5	REVERE	Property damage only (none injured)	0	0	2	Sideswipe, same direction	V1: Travelling straight ahead / V2:Changing lanes	V1:E / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Cloudy			REVERE BEACH PARKWAY			State police	PW201136400213	2011-0A5-007850
3155870	12/24/2011	3:01 PM		6	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:S / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Clear			REVERE BEACH PARKWAY Rte 145 S / NORTHSHORE ROAD			State police	PW201218400604 / PW201308401035	2011-0A5-007866 / 2011-0A5-007866
2937671	3/2/2012	8:37 AM		5	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Entering traffic lane / V2:Travelling straight ahead	V1:N / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Wet	Daylight	Cloudy			REVERE BEACH PARKWAY			State police	PW201206500224	2012-0A5-001689
3002964	3/15/2012	1:25 PM		4	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Turning left / V2:Travelling straight ahead	V1:W / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Clear			REVERE BEACH PARKWAY			State police	PW201207900504	2012-0A5-002161
3168288	3/22/2012	4:33 PM		4	REVERE	Property damage only (none injured)	0	0	2	Sideswipe, same direction	V1: Changing lanes / V2:Slowing or stopped in traffic	V1:E / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Clear			REVERE BEACH PARKWAY Rte 145 S			State police	PW201219300904	2012-0A5-002390
3376893	4/25/2012	9:50 AM		3	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Turning left	V1:E / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Clear			REVERE BEACH PARKWAY Rte 145			State police	PW201309100607	2012-0A5-003534
3138860	5/22/2012	11:08 AM		2	REVERE	Not Reported	0	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Wet	Daylight	Rain			REVERE BEACH PARKWAY Rte 145 W / NORTHSHORE ROAD			State police	PW201217000232	2012-0A5-004391
3293920	11/22/2012	4:54 AM		4	REVERE	Non-fatal injury	1	0	2	Angle	V1: Turning left / V2:Travelling straight ahead	V1:W / V2:S	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Cloudy			REVERE BEACH PARKWAY Rte 145			State police	PW201233200902	2012-0A5-013247
3322795	12/11/2012	8:25 AM		2	REVERE	Property damage only (none injured)	0	0	2	Sideswipe, same direction	V1: Travelling straight ahead / V2:Changing lanes	V1:E / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Cloudy		0 feet E of		State police	PW201236600406	2012-0A5-013906		
3356230	2/19/2013	8:44 PM		2	REVERE	Property damage only (none injured)	0	0	2	Sideswipe, same direction	V1: Turning left / V2:Making U-turn	V1:E / V2:E	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger car)		Wet	Dark - lighted roadway	Rain			REVERE BEACH PARKWAY Rte 145 S			State police	PW201305100604	2013-0A5-001542
3361731	2/20/2013	8:20 AM		3	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:W / V2:S	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Clear			REVERE BEACH PARKWAY			State police	PW201305901334	2013-0A5-001567
3375574	3/22/2013	1:45 PM		5	REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Cloudy			REVERE BEACH PARKWAY Rte 16 W			State police	PW201308701329	2013-0A5-002576
3491171	5/26/2013	12:35 AM		7	REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Clear/Cloudy			REVERE BEACH PARKWAY Rte 145			State police	PW201318300503	2013-0A5-004607
3476534	6/9/2013	5:40 AM		7	REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:W / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Unknown heavy truck, cannot classify)		Dry	Daylight	Clear			REVERE BEACH PARKWAY Rte 145 N			State police	PW201317501301	2013-0A5-005313
3584870	8/27/2013	11:13 AM		2	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:W / V2:S	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger car)		Dry	Daylight	Not Reported			REVERE BEACH PARKWAY Rte 145 W			State police	PW201325400217	2013-0A5-009023
3584003	9/5/2013	9:25 AM		4	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Turning left / V2:Travelling straight ahead	V1:E / V2:W	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger car)		Wet	Daylight	Cloudy			REVERE BEACH PARKWAY Rte 145 W			State police	PW201325300549	2013-0A5-009303
3600490	9/30/2013	5:00 PM		1	REVERE	Non-fatal injury	1	0	1	Single vehicle crash	V1: Slowing or stopped in traffic	V1:N	V1:(Collision with pedestrian)	V1:(Passenger car)	P2-Pedestrian	Dry	Daylight	Clear			REVERE BEACH PARKWAY Rte 145			State police	PW201327500506	2013-0A5-010043
3603989	10/5/2013	10:12 PM		6	REVERE	Non-fatal injury	1	0	1	Angle	V1: Travelling straight ahead	V1:S	V1:(Collision with cyclist (bicycle, tricycle, unicycle, pedal car))	V1:(Passenger car)	P2-Pedalcyclist (bicycle, tricycle, unicycle, pedal car)	Dry	Dark - lighted roadway	Clear			REVERE BEACH PARKWAY Rte 145			State police	PW201328100302	2013-0A5-010169
3630037	10/24/2013	3:28 PM		4	REVERE	Non-fatal injury	1	0	1	Single vehicle crash	V1: Travelling straight ahead	V1:S	V1:(Collision with pedestrian)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)	P1-Pedestrian	Dry	Daylight	Clear		/ REVERE BEACH PARKWAY Rte 145			State police	PW201330400315	2013-0A5-010570	
3626645	10/27/2013	2:19 AM		7	REVERE	Property damage only (none injured)	0	0	1	Single vehicle crash	V1: Turning right	V1:S	V1:(Collision with tree)	V1:(Passenger car)		Dry	Dark - lighted roadway	Clear			REVERE BEACH PARKWAY Rte 145 S			State police	PW201330300603	2013-0A5-010623
3675834	12/3/2013	9:14 PM		2	REVERE	Property damage only (none injured)	0	0	2	Head-on	V1: Turning left / V2:Not reported	V1:E / V2:W	V1:(Collision with motor vehicle in traffic) V2:[]	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Clear			REVERE BEACH PARKWAY Rte 145			State police	PW201334400128	2013-0A5-011539
3712549	12/19/2013	9:53 PM		4	REVERE	Non-fatal injury	3	0	3	Angle	V1: Turning left / V2:Turning left / V3:Travelling straight ahead	V1:E / V2:E / V3:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger car) V3:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Dark - lighted roadway	Clear			REVERE BEACH PARKWAY Rte 145			State police	PW201400900520	2013-0A5-011982
3716768	1/14/2014	7:55 PM		2	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Turning left	V1:S / V2:N	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Wet	Dark - roadway not lighted	Rain			Rte 145 N			State police	PW201402100642	2014-0A5-000341
3732542	2/7/2014	12:15 AM		5	REVERE	Property damage only (none injured)	0	0	2	Sideswipe, same direction	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:N / V2:N	V1:(Collision with motor vehicle in Collision													





## Suffolk Downs Redevelopment Phase 1 Waiver Tomasello Drive at Winthrop Avenue

Crash Number	Crash Date	Crash Time	City/Town	Crash Severity	Number of NonFatal Injuries	Number of Fatal Injuries	Number of Vehicles	Manner of Collision	Vehicle Action Prior to Crash	Vehicle Configuration	Non Motorist Type	Road Surface	Ambient Light	Weather Condition	Roadway	Distance And Direction From Intersection	Police Agency	RMV Document #	Report IDs
4007248	2/3/2015	3:55 PM	REVERE	Property damage only (none injured)	0	0	1	Single vehicle crash	V1: Travelling straight ahead	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)	0	Snow	Daylight	Clear	REVERE BEACH PARKWAY Rte 145 S	0	State police	PW201504801214	2015-0A5-000723
4009384	2/17/2015	5:55 PM	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Other / V2:Travelling straight ahead	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)	0	Dry	Dark - lighted roadway	Clear	REVERE BEACH PARKWAY Rte 145 N	0	State police	PW201505000127	2015-0A5-001043
4017909	2/11/2015	6:57 PM	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Slowing or stopped in traffic	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)	0	Ice	Dark - lighted roadway	Snow/Blowing sand, snow	REVERE BEACH PARKWAY Rte 145 N	0	State police	PW201506800411	2015-0A5-000899 / 2015-0A5-000899
4022622	3/12/2015	3:32 PM	REVERE	Non-fatal injury	1	0	3	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead / V3:Slowing or stopped in traffic	V1:(Passenger car) V2:(Passenger car) V3:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)	0	Dry	Daylight	Not Reported	REVERE BEACH PARKWAY Rte 145 N	0	State police	PW201507900118	2015-0A5-001558
4044436	5/18/2015	6:35 PM	REVERE	Property damage only (none injured)	0	0	1	Single vehicle crash	V1: Turning right	V1:(Passenger car)	0	Dry	Daylight	Clear	REVERE BEACH PARKWAY Rte 145 S	0	State police	PW201514600933 / PW201514600933	2015-0A5-003352 / 2015-0A5-003352 / 2015-0A5-003352
4068467	7/20/2015	8:45 AM	REVERE	Non-fatal injury	1	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Passenger car) V2:(Passenger car)	0	Dry	Daylight	Clear	REVERE BEACH PARKWAY Rte 145 N	0	State police	PW201512500330	2015-0A5-005345 / 2015-0A5-005345
4072249	8/8/2015	11:25 AM	REVERE	Non-fatal injury	1	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)	P3:Other non-motorist (wheelchair, etc.)	Dry	Daylight	Cloudy	REVERE BEACH PARKWAY Rte 145 S	0	State police	PW2015122500311	2015-0A5-005889
4125931	12/20/2015	9:30 AM	REVERE	Non-fatal injury	1	0	2	Angle	V1: Travelling straight ahead / V2:Entering traffic lane	V1:(Passenger car) V2:(Passenger car)	0	Dry	Daylight	Clear	REVERE BEACH PARKWAY Rte 145 S	0	State police	PW201536200167	2015-0A5-008917 / 2015-0A5-008917 / 2015-0A5-008917
2679669	1/7/2011	10:25 AM	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Turning left / V2:Travelling straight ahead	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger car)		Dry	Daylight	Not Reported	REVERE BEACH PARKWAY		State police	PW201101300119	2011-0A5-000082
2820644	11/18/2011	9:28 AM	REVERE	Non-fatal injury	1	0	2	Angle	V1: Turning left / V2:Travelling straight ahead	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Clear	TOMESSELLO WAY / REVERE BEACH PARKWAY Rte 145 S		State police	PW201133900211	2011-0A5-007115
3376953	10/12/2012	9:25 PM	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Clear	WINTHROP PARKWAY Rte 145 N		State police	PW201309100715	2012-0A5-011781
3453053	6/3/2013	5:50 PM	REVERE	Property damage only (none injured)	0	0	1	Single vehicle crash	V1: Turning right	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)	P2:Pedalcyclist (bicycle, tricycle, unicycle, pedal car)	Dry	Daylight	Cloudy	Rte 145 S		State police	PW201316400616	2013-0A5-005039
3541155	7/24/2013	4:15 PM	REVERE	Non-fatal injury	1	0	1	Angle	V1: Turning right	V1:(Passenger car)		Dry	Daylight	Clear	REVERE BEACH PARKWAY Rte SR145 E / UNKNOWN		State police	PW201321100228	2013-0A5-007553
3603387	9/27/2013	4:00 PM	REVERE	Property damage only (none injured)	0	0	1	Single vehicle crash	V1: Travelling straight ahead	V1:(Passenger car)		Dry	Daylight	Clear	REVERE BEACH PARKWAY Rte SR145 S / UNNAMED ROAD		State police	PW201328001018	2013-0A5-009962
3826855	1/11/2014	6:18 PM	REVERE	Not Reported	0	0	1	Single vehicle crash	V1: Travelling straight ahead	V1:(Passenger car)	P2:Pedestrian	Wet	Dark - lighted roadway	Rain/Fog, smog, smoke	REVERE BEACH PARKWAY		Local police	PR201402400227	14-1178-AC
3830022	5/29/2014	10:45 AM	REVERE	Non-fatal injury	1	0	2	Angle	V1: Travelling straight ahead / V2:Turning left	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Clear	REVERE BEACH PARKWAY Rte SR145 /		State police	PW201416100507	2014-0A5-003757
3842143	6/10/2014	5:09 AM	REVERE	Non-fatal injury	1	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Passenger car) V2:(Passenger car)		Wet	Dawn	Cloudy	REVERE BEACH PARKWAY Rte SR145 /		State police	PW201416400413	2014-0A5-004139
3959853	9/22/2014	2:30 PM	REVERE	Non-fatal injury	3	0	2	Angle	V1: Travelling straight ahead / V2:Entering traffic lane	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Clear	REVERE BEACH PARKWAY Rte SR145 /		State police	PW201428900546	2014-0A5-007136
3971139	10/22/2014	1:35 PM	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Travelling straight ahead	V1:(Passenger car) V2:(Passenger car)		Wet	Daylight	Cloudy	REVERE BEACH PARKWAY Rte 145 E / WINTHROP AVENUE		State police	PW201431700624	2014-0A5-007925
3976529	11/21/2014	4:50 PM	REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Changing lanes / V2:Travelling straight ahead	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Clear	REVERE BEACH PARKWAY Rte 145 N		State police	PW201432900317	2014-0A5-008647
3997021	12/23/2014	6:13 AM	REVERE	Non-fatal injury	1	0	1	Head-on	V1: Turning left	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)	P2:Pedestrian	Wet	Dark - lighted roadway	Rain	REVERE BEACH PARKWAY Rte SR145 S / FURLONG DRIVE		Local police	PR201500500140	14rev-37809-ac
This data was																			

Suffolk Downs Redevelopment Phase 1 Waiver  
Crescent Avenue at Bennington Street

Crash Number	Crash Date	Crash Time	City/Town	Crash Severity	Number of NonFatal Injuries	Number of Fatal Injuries	Manner of Collision	Vehicle Action Prior to Crash	Most Harmful Events	Vehicle Configuration	Non Motorist Type	Road Surface	Ambient Light	Weather Condition	Roadway	Distance And Direction From Intersection	Near Intersection Roadway	Police Agency	RMV Document #	Report IDs
4064500	6/30/2015	7:24 AM	REVERE	Non-fatal injury	1	0	Angle	V1: Travelling straight ahead / V2:Turning left	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)	0	Dry	Daylight	Clear	BENNINGTON STREET / CRESCENT AVENUE	0	0	Local police	PR201519500138	15rev-20162-ac
3392192	3/12/2013	8:03 PM	REVERE	Non-fatal injury	1	0	Head-on	V1: Travelling straight ahead	V1:(Collision with pedestrian)	V1:(Passenger car)	P2-Pedestrian	Wet	Dark - lighted roadway	Rain	BENNINGTON STREET			Local police	PR201308000349	13-6393
3126020	4/12/2012	2:28 PM	REVERE	Non-fatal injury	1	0	Angle	V1: Travelling straight ahead / V2:Turning left	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Wet	Daylight	Rain	BENNINGTON STREET		CRESCENT AVENUE	Local police	PR201211000138	
2749393	7/26/2011	5:20 PM	REVERE	Property damage only (none injured)	0	0	Angle	V1: Entering traffic lane / V2:Travelling straight ahead	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Clear	CRESCENT AVENUE / BENNINGTON STREET			Local police	PR201121400645	
2738079	6/14/2011	3:20 PM	REVERE	Not Reported	0	0	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:( ) V2:( )		Dry	Daylight	Cloudy	BENNINGTON STREET			Local police	PR201118100140	

**Suffolk Downs Redevelopment Phase 1 Waiver  
Bennington Street at Winthrop Avenue/State Road**

Crash Number	Crash Date	Crash Time	City/Town	Crash Severity	Number of NonFatal Injuries	Number of Fatal Injuries	Number of Vehicles	Manner of Collision	Most Harmful Events	Vehicle Configuration	Non Motorist Type	Road Surface	Ambient Light	Weather Condition	Roadway	Distance And Direction From Intersection	Near Intersection Roadway	Police Agency	RMV Document #	Report ID#s	
4029015	2/18/2015	8:15 PM	REVERE	Non-fatal injury	1	0	2	Angle	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		0	Snow	Dark - lighted roadway	Cloudy	WINTHROP AVENUE	0	0	Local police	PR201509100135	15rev-5532-ac
2733403	6/10/2011	11:30 PM	REVERE	Property damage only (none injured)	0	0	2	Angle	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Dark - lighted roadway	Clear	STATE ROAD / WINTHROP AVENUE			Local police	PR201116800341		
2757220	8/4/2011	11:30 PM	REVERE	Non-fatal injury	1	0	1	Sideswipe, same direction	V1:(Collision with pedestrian)	V1:(Passenger car)	P2:Pedestrian / P3:Pedestrian / P4:Pedestrian	Dry	Dark - roadway not lighted	Clear	STATE ROAD		WINTHROP AVENUE	Local police	PR201123800125		
2790854	10/15/2011	12:59 AM	REVERE	Non-fatal injury	2	0	2	Angle	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Wet	Dark - lighted roadway	Cloudy/Rain	BENNINGTON STREET / WINTHROP AVENUE			Local police	PR201129700145		
2812488	11/18/2011	5:00 PM	REVERE	Non-fatal injury	1	0	1	Single vehicle crash	V1:(Collision with median barrier)	V1:(Passenger car)		Dry	Dark - lighted roadway	Clear	STATE ROAD / WINTHROP AVENUE / BENNINGTON STREET			Local police	PR201131400726		
3168289	3/23/2012	3:10 PM	REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger car)		Dry	Daylight	Clear	STATE ROAD Rte 145 S		WINTHROP AVENUE	State police	PW201219300714	2012-0A5-002434	
3069205	5/1/2012	11:55 AM	REVERE	Not Reported	0	0	2	Angle	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Single-unit truck (2-axle, 6-tire))		Wet	Daylight	Cloudy/Rain	STATE ROAD Rte 145 E		WINTHROP AVENUE	State police	PW201213000406	2012-0A5-003682	
3243283	8/1/2012	8:45 AM	REVERE	Property damage only (none injured)	0	0	2	Sideswipe, same direction	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Unknown heavy truck, cannot classify)		Dry	Daylight	Clear/Other	WINTHROP AVENUE / BENNINGTON STREET			Local police	PR201223300118		
3229836	8/7/2012	12:35 AM	REVERE	Property damage only (none injured)	0	0	1	Single vehicle crash	V1:(Collision with light pole or other post/support)	V1:Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Dark - lighted roadway	Not Reported	STATE ROAD Rte 145 E		WINTHROP AVENUE	State police	PW201222000223	2012-0A5-008648	
3276342	9/6/2012	7:44 AM	REVERE	Non-fatal injury	1	0	1	Angle	V1:(Collision with pedestrian)	V1:(Passenger car)	P3:Pedestrian	Dry	Daylight	Clear	WINTHROP AVENUE			Local police	PR201225600205		
3349345	10/28/2012	11:14 PM	REVERE	Non-fatal injury	1	0	1	Single vehicle crash	V1:(Collision with pedestrian)	V1:(Passenger car)	P2:Pedestrian	Wet	Dark - lighted roadway	Rain/Cloudy	BENNINGTON STREET			Local police	PR201301001004	12-581341-AC	
3368398	1/10/2013	5:13 PM	REVERE	Non-fatal injury	1	0	1	Unknown	V1:(Collision with pedestrian)	V1:(Passenger car)	P2:Pedestrian	Dry	Dark - lighted roadway	Clear	STATE ROAD			Local police	PR201302800143	13-858	
3370528	1/24/2013	3:45 PM	REVERE	Non-fatal injury	3	0	3	Head-on	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with motor vehicle in traffic)	V1:Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger car) V3:Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Clear	BENNINGTON STREET			Local police	PR201303200113	13-1947	
3368854	2/1/2013	8:09 AM	REVERE	Property damage only (none injured)	0	0	1	Single vehicle crash	V1:(Collision with pedestrian)	V1:Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)	P2:Pedestrian	Dry	Daylight	Clear	WINTHROP AVENUE		WASHINGTON AVENUE	Local police	PR201303800144	13-2712-AC	
3543146	7/26/2013	11:51 AM	REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Wet	Daylight	Cloudy/Rain	WINTHROP AVENUE			Local police	PR201321100301	13-20290-AC	
3589834	9/7/2013	9:40 PM	REVERE	Non-fatal injury	1	0	2	Angle	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Dark - lighted roadway	Clear	WINTHROP AVENUE / BENNINGTON STREET			Local police	PR201325500327	13-24894-ac	
3730850	12/9/2013	8:35 AM	REVERE	Non-fatal injury	1	0	1	Angle	V1:(Collision with pedestrian)	V1:Light truck(van, mini-van, panel, pickup, sport utility) with only four tires)		Wet	Daylight	Cloudy/Rain	WINTHROP AVENUE			Local police	PR201335200210	13-34555-ac	
3763059	1/8/2014	1:10 PM	REVERE	Non-fatal injury	1	0	1	Angle	V1:(Collision with pedestrian)	V1:(Passenger car)	P2:Pedestrian	Dry	Daylight	Clear	WINTHROP AVENUE		STATE ROAD	Local police	PR201402300715	14-831-AC	
3809254	5/23/2014	12:10 AM	REVERE	Property damage only (none injured)	0	0	1	Single vehicle crash	V1:(Collision with curb)	V1:(Passenger car)		Wet	Dark - lighted roadway	Not Reported	STATE ROAD Rte 145 E		WINTHROP AVENUE	State police	PW201414700515	2014-0A5-003541	
3949767	9/6/2014	11:44 AM	REVERE	Non-fatal injury	3	0	2	Rear-end	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(	V1:Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger car) V3:Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V1:(Passenger car) V2:(Passenger car) V3:(Unknown vehicle configuration)		Dry	Daylight	Clear/Other	STATE ROAD / WINTHROP AVENUE / DONNELLY SQUARE			Local police	PR201425400321	14-26724-AC	
4002971	11/21/2014	7:08 PM	REVERE	Property damage only (none injured)	0	0	3	Angle				Dry	Dark - lighted roadway	Clear	WINTHROP AVENUE		STATE ROAD	Local police	PR201434900408	14REV-34595-AC	
This data was																					

Suffolk Downs Redevelopment Phase 1 Waiver  
Winthrop Avenue at Revere Beach Parkway

Crash Number	Crash Date	Crash Time	City/Town	Locality	Crash Severity	Number of NonFatal Injuries	Number of Fatal Injuries	Number of Vehicles	Manner of Collision	Vehicle Action Prior to Crash	Most Harmful Events	Vehicle Configuration	Non Motorist Type	Road Surface	Ambient Light	Weather Condition	Roadway	Distance And Direction From Intersection	Near Intersection Roadway	Police Agency	RMV Document #	Report IDs
3715058	1/8/2014	12:14 PM	REVERE	REVERE	Property damage only (none injured)	0	0	1	Single vehicle crash	V1: Travelling straight ahead	V1:(Collision with light pole or other post/support)	V1:(Passenger car)		Slush	Daylight	Clear	WINTHROP AVENUE		REVERE BEACH PARKWAY Rte 145 S	State police	PW201401500511	2014-0A5-000184
4042526	5/11/2015	8:50 AM	REVERE	REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck/van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Cloudy	REVERE BEACH PARKWAY Rte 145 S			State police	PW201513900349	2015-0A5-003108
2680657	1/8/2011	10:55 PM	REVERE	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck/van, mini-van, panel, pickup, sport utility) with only four tires)		Wet	Dark - lighted roadway	Not Reported	Rte 145 N / WINTHROP AVENUE			State police	PW201101800306	2011-0A5-000111
3441491	5/30/2013	3:00 PM	REVERE	REVERE	Property damage only (none injured)	0	0	2	Rear-end	V1: Travelling straight ahead / V2:Turning right	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)		Dry	Daylight	Clear	REVERE BEACH PARKWAY			Local police	PR201315600116	13-14129-ac
4063777	7/7/2015	12:35 PM	REVERE	REVERE	Non-fatal injury	1	0	3	Rear-end	V1: Travelling straight ahead / V2:Slowing or stopped in traffic / V3:Slowing or stopped in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic) V3:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car) V3:(Passenger car)		Dry	Daylight	Cloudy	REVERE BEACH PARKWAY Rte 145 S		WINTHROP AVENUE	State police	PW201520200142	2015-0A5-004947
3154672	6/25/2012	2:15 AM	REVERE	REVERE	Property damage only (none injured)	0	0	1	Single vehicle crash	V1: Turning left	V1:(Collision with curb)	V1:(Passenger car)		Dry	Dark - lighted roadway	Clear	REVERE BEACH PARKWAY Rte 145 / WINTHROP AVENUE /			State police	PW201218000228	2012-0A5-006080
4034219	4/13/2015	10:10 AM	REVERE	REVERE	Non-fatal injury	2	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck/van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Clear	REVERE BEACH PARKWAY Rte 145 S		WINTHROP AVENUE	State police	PW201511200752	2015-0A5-002346 / 2015-0A5-002346
4112648	11/18/2015	10:10 AM	REVERE	REVERE	Property damage only (none injured)	0	0	2	Angle	V1: Travelling straight ahead / V2:Turning left	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck/van, mini-van, panel, pickup, sport utility) with only four tires)		Dry	Daylight	Clear	REVERE BEACH PARKWAY Rte 145 N			State police	PW201532400198	2015-0A5-008268

SELECT [Crash Number], [Crash Date], [Crash Time], [Crash Hour], [City/Town], [Locality], [RPA Abbreviation], [MassHighway District], [Crash Severity], [Maximum Injury Severity Reported], [Number of Nonfatal Injuries], [Number of Fatal Injuries], [Number of Vehicles], [Manner of Collision], [Vehicle Action Prior to Crash], [Vehicle Travel Directions], [First Harmful Event], [First Harmful Event Location], [Most Harmful Events], [Vehicle Sequence of Events], [Vehicle Configuration], [FMSCA Reportable], [Age of Driver - Youngest Known], [Age of Driver - Oldest Known], [Driver Contributing Codes], [Non Motorist Type], [Non Motorist Action], [Non Motorist Location], [Hit & Run], [Road Surface], [Ambient Light], [Weather Condition], [Street Number], [Roadway], [Distance And Direction From Intersection], [Near Intersection Roadway], [Exit Route], [Distance And Direction From Exit Number], [Exit Number], [Milemarker Route], [Distance And Direction From Milemarker], [Milemarker], [Landmark], [Distance And Direction From Landmark], [Traffic Way], [Speed Limit], [Roadway Intersection Type], [Traffic Control Device Type], [Traffic Device Functioning], [Police Agency], [Linked RI Functional Classification], [Linked RI Access Control], [Linked RI Toll Road], [Linked RI Jurisdiction], [Linked RI Number of Travel Lanes], [Linked RI Opposing Number of Travel Lanes], [Linked RI Street]

This query was also restricted by a map filter.

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Boston COUNT DATE : May 9th 2017

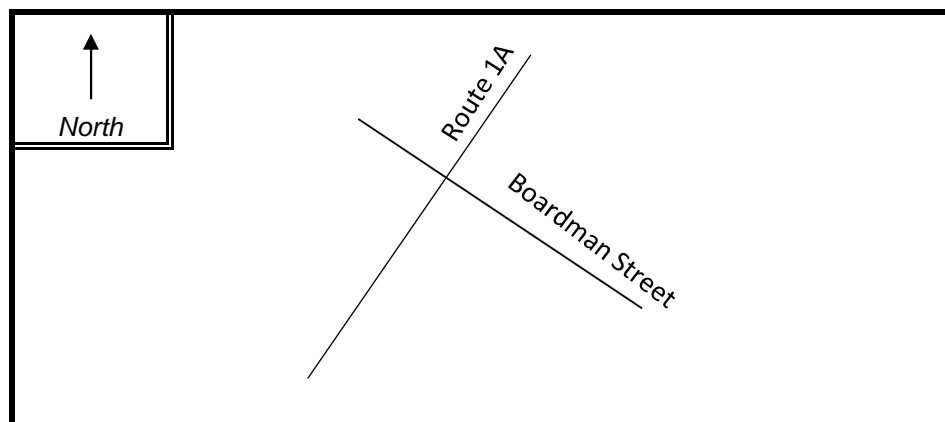
DISTRICT : 5 UNSIGNALIZED : ☐ SIGNALIZED : ☒

### ~ INTERSECTION DATA ~

MAJOR STREET : Boardman Street

MINOR STREET(S) : Route 1A

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	North	East	South	West		
PEAK HOURLY VOLUMES (AM/PM) :	1,630	396	2,096	173		4,295

" K " FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**47,722**

TOTAL # OF CRASHES :

**1**

# OF YEARS :

**5**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**0.20**

CRASH RATE CALCULATION :

**0.01**

$$\text{RATE} = \frac{(A * 1,000,000)}{(V * 365)}$$

Comments : \_\_\_\_\_

Project Title & Date: Suffolk Downs Redevelopment Phase 1 Waiver

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

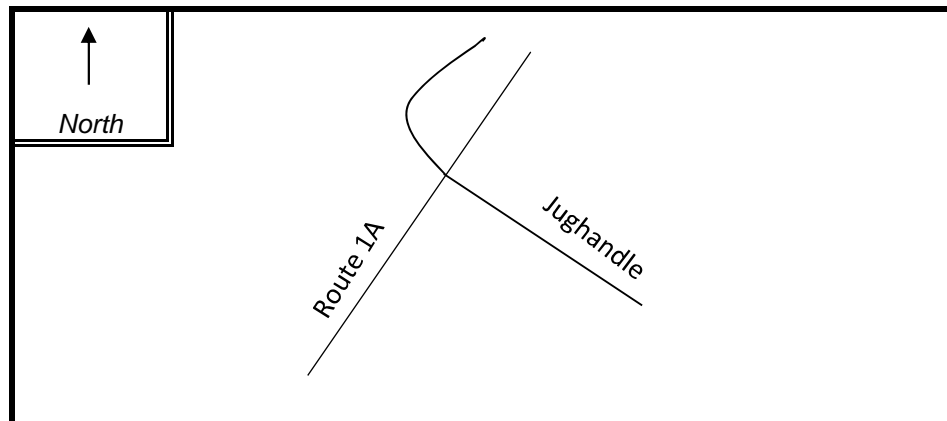
DISTRICT : 5 UNSIGNALIZED : ☐ SIGNALIZED : ☒

### ~ INTERSECTION DATA ~

MAJOR STREET : Jughandle

MINOR STREET(S) : Route 1A

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	North	East	South	West		
PEAK HOURLY VOLUMES (AM/PM) :	1,612	1	1,891	137		3,641

" K " FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**40,456**

TOTAL # OF CRASHES :

**2**

# OF YEARS :

**5**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**0.40**

**CRASH RATE CALCULATION :**

**0.03**

$$\text{RATE} = \frac{(A * 1,000,000)}{(V * 365)}$$

Comments : \_\_\_\_\_

Project Title & Date : Suffolk Downs Redevelopment Phase 1 Waiver

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

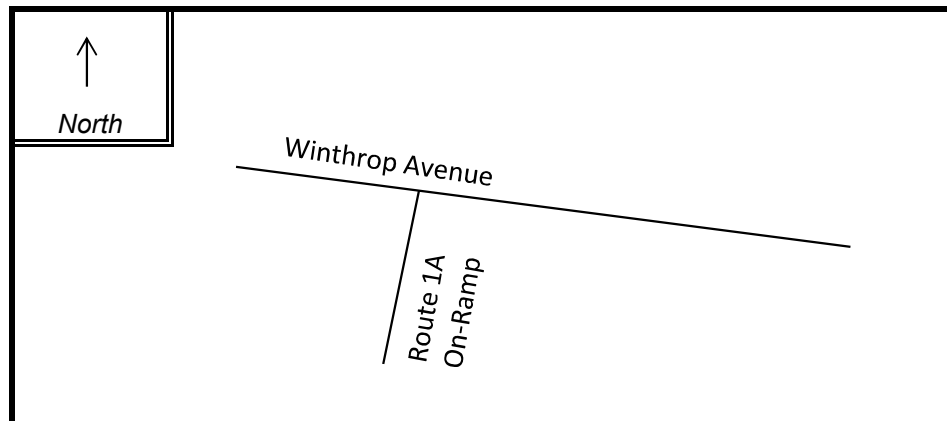
DISTRICT : 5 UNSIGNALIZED : ☒ X SIGNALIZED : ☐

### ~ INTERSECTION DATA ~

MAJOR STREET : Winthrop Avenue

MINOR STREET(S) : Route 1A SB On-Ramp

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	North	East	West	Northwest		
PEAK HOURLY VOLUMES (AM/PM) :	0	1,527	1,650	111		3,288

" K " FACTOR :

**0.090**

INTERSECTION ADT ( **V** ) = TOTAL DAILY APPROACH VOLUME :

**36,533**

TOTAL # OF CRASHES :

**17**

# OF YEARS :

**5**

AVERAGE # OF CRASHES PER YEAR ( **A** ) :

**3.40**

**CRASH RATE CALCULATION :**

**0.25**

$$\text{RATE} = \frac{(A * 1,000,000)}{(V * 365)}$$

Comments : \_\_\_\_\_

Project Title & Date: Suffolk Downs Redevelopment Phase 1 Waiver



## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

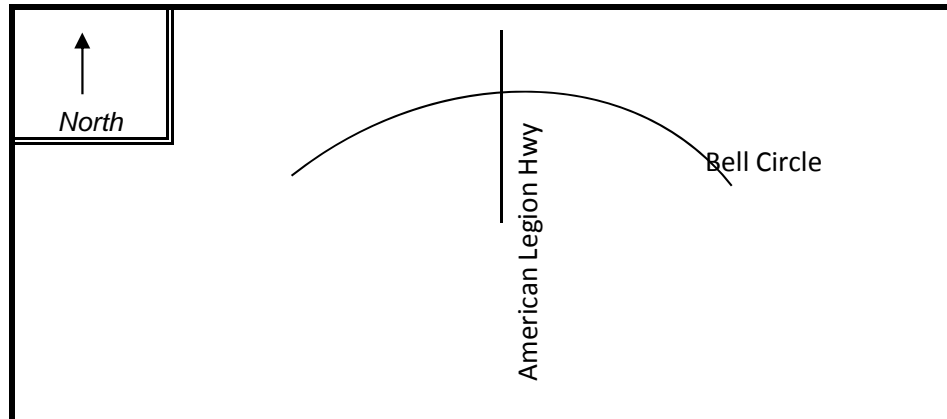
DISTRICT : 5 UNSIGNALIZED : ☐ SIGNALIZED : ☒

### ~ INTERSECTION DATA ~

MAJOR STREET : American Legion Highway North

MINOR STREET(S) : Bell Circle

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	North	East	South	West		
PEAK HOURLY VOLUMES (AM/PM) :	1,047	1,502	893	0		3,442

" K " FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY  
APPROACH VOLUME :

**38,244**

TOTAL # OF CRASHES :

**34**

# OF  
YEARS :

**5**

AVERAGE # OF  
CRASHES PER YEAR ( A ) :

**6.80**

**CRASH RATE CALCULATION :**

**0.49**

RATE =  $\frac{(A * 1,000,000)}{(V * 365)}$

Comments : \_\_\_\_\_

Project Title & Date : Suffolk Downs Redevelopment Phase 1 Waiver

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

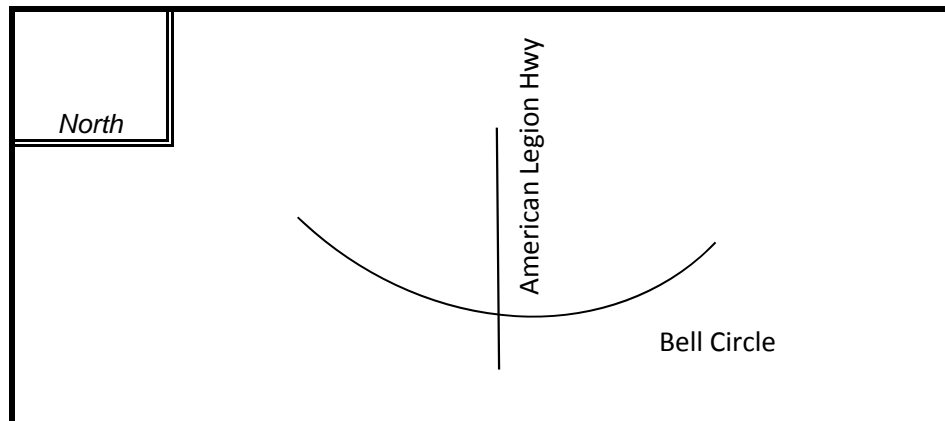
DISTRICT : 5 UNSIGNALIZED : ☐ SIGNALIZED : ☒

### ~ INTERSECTION DATA ~

MAJOR STREET : American Legion Highway South

MINOR STREET(S) : Bell Circle

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	North	East	South	West		
PEAK HOURLY VOLUMES (AM/PM) :	761	0	880	1,367		3,008

" K " FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**33,422**

TOTAL # OF CRASHES :

**33**

# OF YEARS :

**5**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**6.60**

**CRASH RATE CALCULATION :**

**0.54**

RATE =  $\frac{(A * 1,000,000)}{(V * 365)}$

Comments : \_\_\_\_\_

Project Title & Date: Suffolk Downs Redevelopment Phase 1 Waiver

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

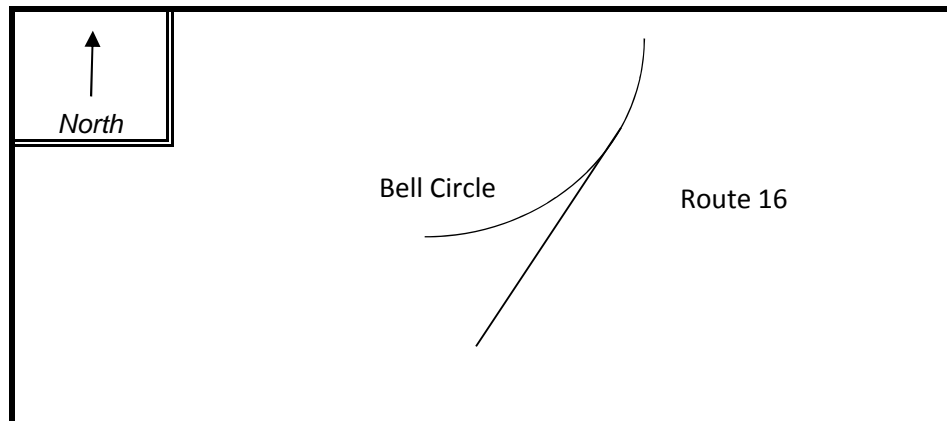
DISTRICT : 5 UNSIGNALIZED : ☐ SIGNALIZED : ☒

### ~ INTERSECTION DATA ~

MAJOR STREET : Route 16

MINOR STREET(S) : Bell Circle

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	SE	S	W			
PEAK HOURLY VOLUMES (AM/PM) :	1,064	460	502			2,026

" K " FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**22,511**

TOTAL # OF CRASHES :

**11**

# OF YEARS :

**5**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**2.20**

**CRASH RATE CALCULATION :**

**0.27**

$$\text{RATE} = \frac{(A * 1,000,000)}{(V * 365)}$$

Comments : \_\_\_\_\_

Project Title & Date : Suffolk Downs Redevelopment Phase 1 Waiver

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

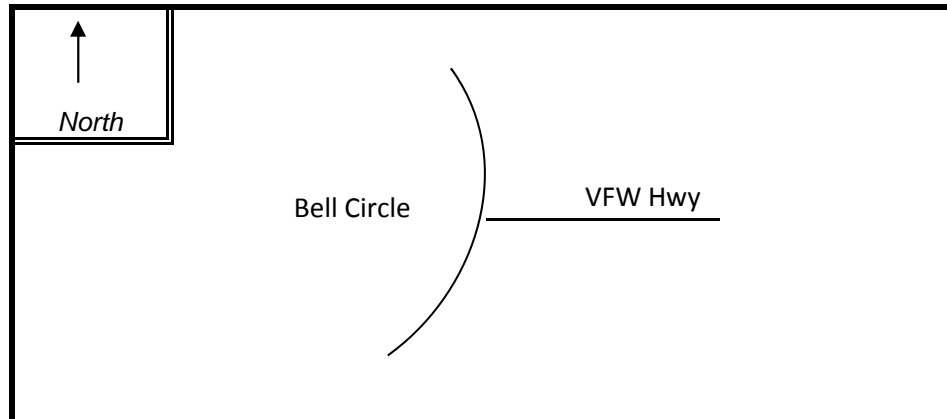
DISTRICT : 5 UNSIGNALIZED : ☐ SIGNALIZED : ☒

### ~ INTERSECTION DATA ~

MAJOR STREET : VFW Highway

MINOR STREET(S) : Bell Circle

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	N	E	S	W		
PEAK HOURLY VOLUMES (AM/PM) :	149	1,034	410	0		1,593

" K " FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**17,700**

TOTAL # OF CRASHES :

**11**

# OF YEARS :

**5**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**2.20**

**CRASH RATE CALCULATION :**

**0.34**

RATE =  $\frac{(A * 1,000,000)}{(V * 365)}$

Comments : \_\_\_\_\_

Project Title & Date : Suffolk Downs Redevelopment Phase 1 Waiver

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

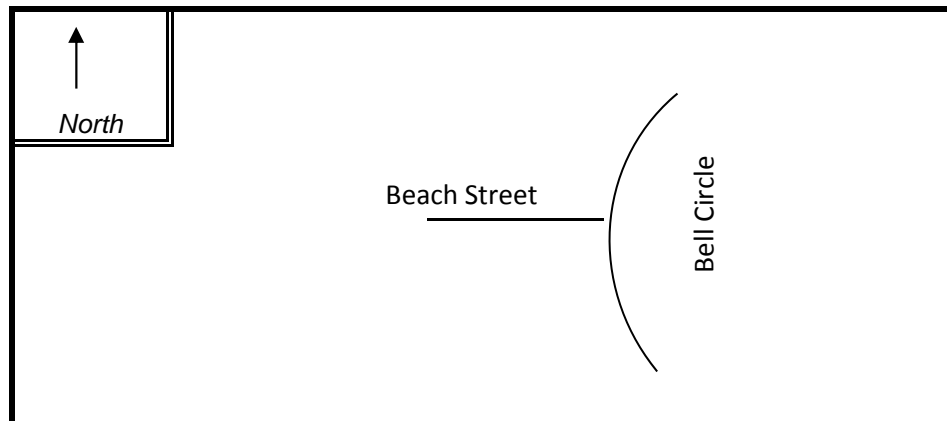
DISTRICT : 5 UNSIGNALIZED : ☐ SIGNALIZED : ☒

### ~ INTERSECTION DATA ~

MAJOR STREET : Beach Street

MINOR STREET(S) : Bell Circle

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	N	E	S	W		
PEAK HOURLY VOLUMES (AM/PM) :	1,441			362		1,803

" K " FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY  
APPROACH VOLUME :

**20,033**

TOTAL # OF CRASHES :

22

# OF  
YEARS :

5

AVERAGE # OF  
CRASHES PER YEAR ( A ) :

**4.40**

**CRASH RATE CALCULATION :**

**0.60**

RATE =  $\frac{(A * 1,000,000)}{(V * 365)}$

Comments : \_\_\_\_\_

Project Title & Date : Suffolk Downs Redevelopment Phase 1 Waiver

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

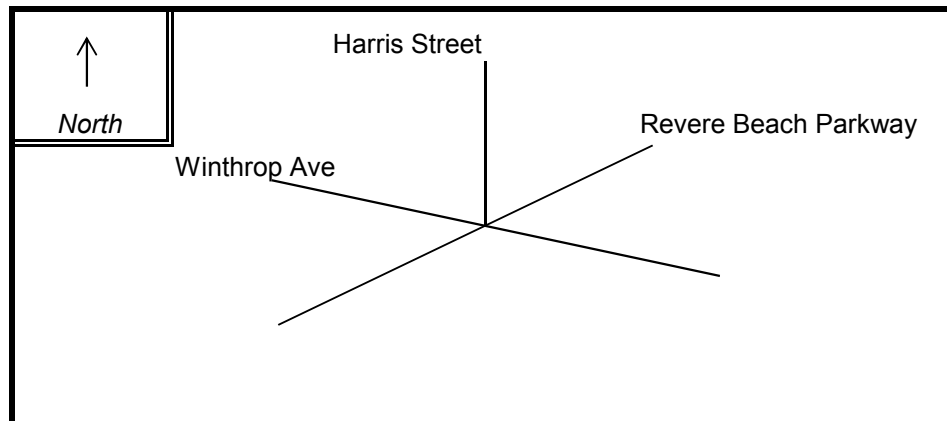
DISTRICT : 5 UNSIGNALIZED : ☐ SIGNALIZED : ☒

### ~ INTERSECTION DATA ~

MAJOR STREET : Revere Beach Parkway

MINOR STREET(S) : Winthrop Avenue/Harris Street

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	EB	SB	WB	SEB	
PEAK HOURLY VOLUMES (AM/PM) :	2,180	256	443	1,328	154	4,361

" K " FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**48,456**

TOTAL # OF CRASHES :

**43**

# OF YEARS :

**5**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**8.60**

**CRASH RATE CALCULATION :**

**0.49**

$$\text{RATE} = \frac{(A * 1,000,000)}{(V * 365)}$$

Comments : \_\_\_\_\_

Project Title & Date: Suffolk Downs Redevelopment Phase 1 Waiver

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

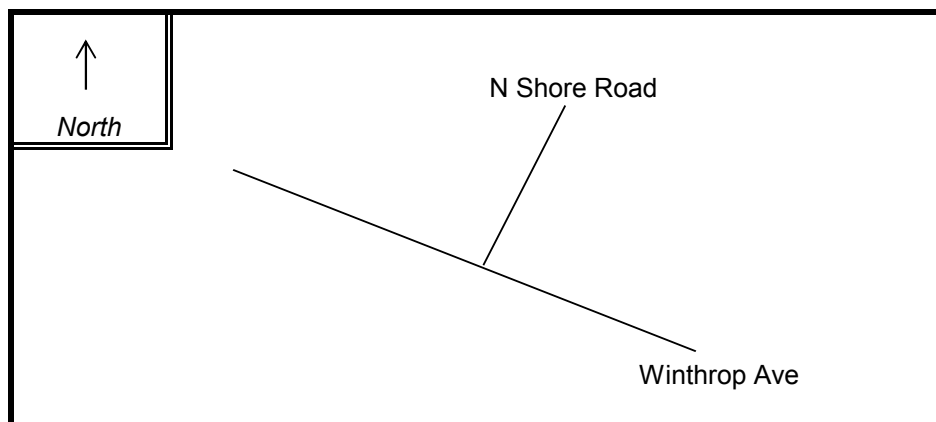
DISTRICT : 5 UNSIGNALIZED : ☐ SIGNALIZED : ☒

### ~ INTERSECTION DATA ~

MAJOR STREET : Winthrop Avenue

MINOR STREET(S) : North Shore Road

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	EB	SB	WB		
PEAK HOURLY VOLUMES (AM/PM) :	0	1,536	327	1,105		2,968

" K " FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**32,978**

TOTAL # OF CRASHES :

46

# OF YEARS :

5

AVERAGE # OF CRASHES PER YEAR ( A ) :

**9.20**

**CRASH RATE CALCULATION :**

**0.76**

$$\text{RATE} = \frac{(A * 1,000,000)}{(V * 365)}$$

Comments : \_\_\_\_\_

Project Title & Date: Suffolk Downs Redevelopment Phase 1 Waiver

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

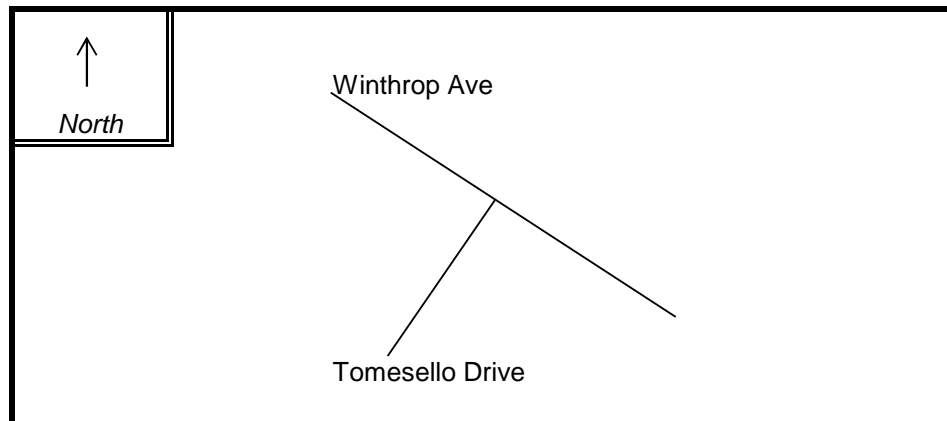
DISTRICT : 5 UNSIGNALIZED : ☐ SIGNALIZED : ☒

### ~ INTERSECTION DATA ~

MAJOR STREET : Winthrop Avenue

MINOR STREET(S) : Tomesello Drive

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	EB	SB	WB		
PEAK HOURLY VOLUMES (AM/PM) :	687	1,378	0	1,033		3,098

" K " FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**34,422**

TOTAL # OF CRASHES :

**21**

# OF YEARS :

**5**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**4.20**

CRASH RATE CALCULATION :

**0.33**

$$\text{RATE} = \frac{(A * 1,000,000)}{(V * 365)}$$

Comments : \_\_\_\_\_

Project Title & Date : Suffolk Downs Redevelopment Phase 1 Waiver



## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

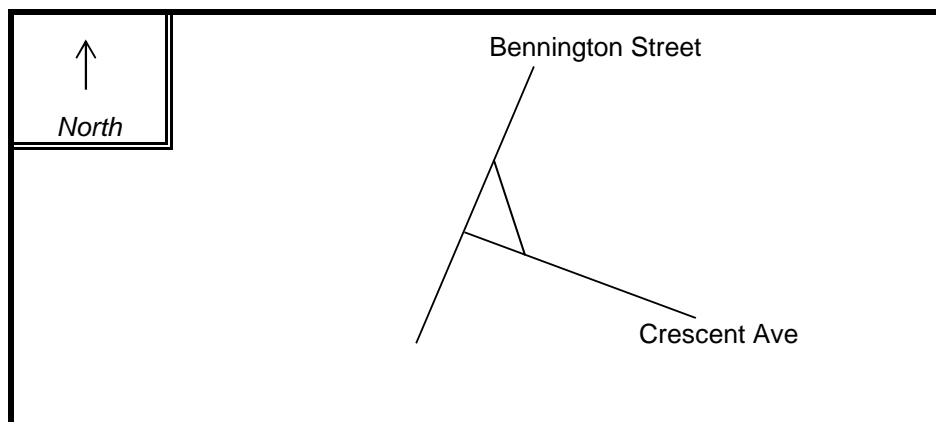
DISTRICT : 5 UNSIGNALIZED : ☒ X SIGNALIZED : ☐

### ~ INTERSECTION DATA ~

MAJOR STREET : Bennington Street

MINOR STREET(S) : Crescent Avenue

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	EB	SB	WB		
PEAK HOURLY VOLUMES (AM/PM) :	612	0	403	174		1,189

" K " FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**13,211**

TOTAL # OF CRASHES :

**5**

# OF YEARS :

**5**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**1.00**

**CRASH RATE CALCULATION :**

**0.21**

$$\text{RATE} = \frac{(A * 1,000,000)}{(V * 365)}$$

Comments : \_\_\_\_\_

Project Title & Date : Suffolk Downs Redevelopment Phase 1 Waiver

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

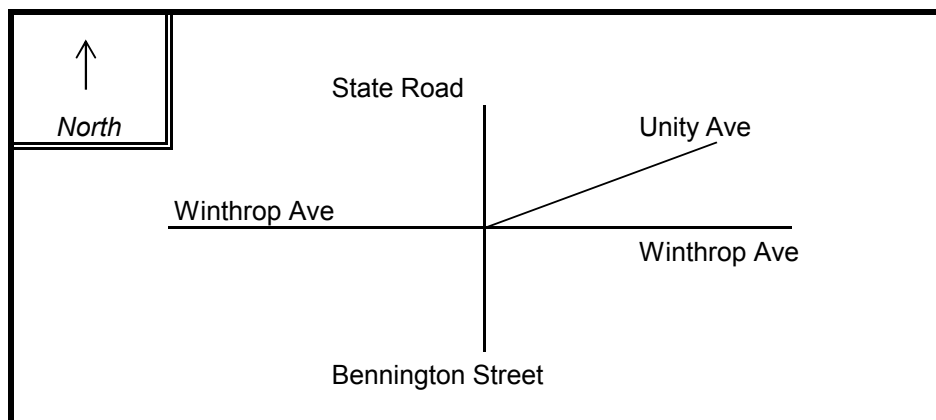
DISTRICT : 5 UNSIGNALIZED : ☐ SIGNALIZED : ☒

### ~ INTERSECTION DATA ~

MAJOR STREET : Winthrop Avenue

MINOR STREET(S) : State Road/Bennington Street/Unity Avenue

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	EB	SB	WB	SWB	
PEAK HOURLY VOLUMES (AM/PM) :	752	555	334	0	4	1,645

"K" FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**18,278**

TOTAL # OF CRASHES :

**21**

# OF YEARS :

**5**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**4.20**

CRASH RATE CALCULATION :

**0.63**

$$\text{RATE} = \frac{(A * 1,000,000)}{(V * 365)}$$

Comments : \_\_\_\_\_

Project Title & Date: Suffolk Downs Redevelopment Phase 1 Waiver

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Revere COUNT DATE : May 9th 2017

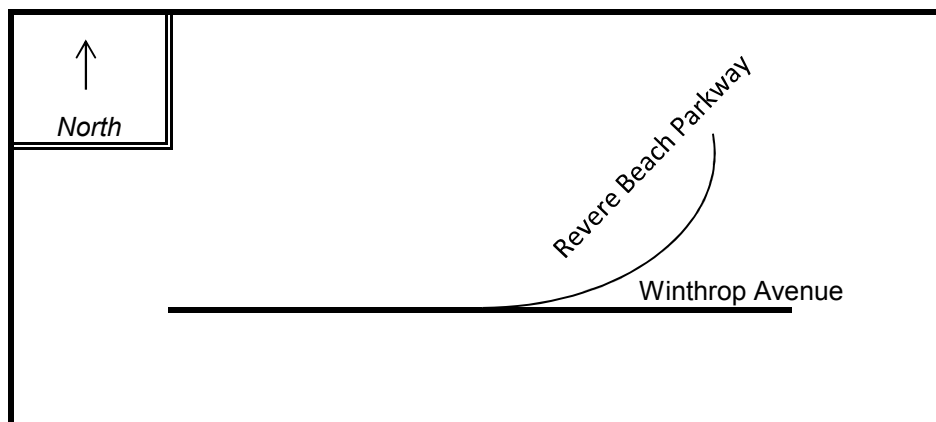
DISTRICT : 5 UNSIGNALIZED : ☒ X SIGNALIZED : ☐

### ~ INTERSECTION DATA ~

MAJOR STREET : Revere Beach Parkway

MINOR STREET(S) : Winthrop Avenue

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	EB	SB	WB		
PEAK HOURLY VOLUMES (AM/PM) :		1,620	465	595		2,680

" K " FACTOR :

**0.090**

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

**29,778**

TOTAL # OF CRASHES :

**8**

# OF YEARS :

**5**

AVERAGE # OF CRASHES PER YEAR ( A ) :

**1.60**

**CRASH RATE CALCULATION :**

**0.15**

$$\text{RATE} = \frac{(A * 1,000,000)}{(V * 365)}$$

Comments : \_\_\_\_\_

Project Title & Date: Suffolk Downs Redevelopment Phase 1 Waiver

# Trip Generation

- Program A Trip Generation Table
- Program B Trip Generation Table
- Phase 1 Project Trip Generation Table

Suffolk Downs  
Trip Generation Estimate  
November 2017

Suffolk Downs Redevelopment Estimated Trip Generation - Summary of Program A

	Size	Distributi on	Trip Rate	Unadjusted Vehicle Trips	Net Unadjusted Vehicle Trips	VOR	Person Trips	Internal Capture	Adjusted Person Trips	Pass-by Trips	SOV/HOV	Transit Share	Walk	Bike	Other	HVOR	Adjusted Vehicle Trips	Transit Trips	Walk/Bike/Other	Avg Pass-by Trips
Daily Mid-Rise Res			5.45	7350	7350		12,275		11,805								3504	5,269	2,523	
In	1,349	50.0%		3675	3675	1.67	6,138	7%	5,733		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	1731	2,603	1,296	
Out	units	50.0%		3675	3675	1.67	6,138	4%	5,871		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	1773	2,666	1,327	
Daily High-Rise Res			3.98	21472	21472		35,858		33,900								10234	15,391	7,661	
In	5396	50.0%		10736	10736	1.67	17,929	7%	16,748		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	5056	7,604	3,765	
Out	units	50.0%		10736	10736	1.67	17,929	4%	17,152		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	5178	7,787	3,876	
Daily CCRC			2.96	2233	2233		3,729		3,526								1065	1,601	797	
In	755	50.0%		1117	1117	1.67	1,865	7%	1,742		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	526	791	394	
Out	units	50.0%		1117	1117	1.67	1,865	4%	1,784		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	538	810	403	
Daily Hotel			10.78	8976	8976		14,953		12,270								3408	6,898	1,889	
In	833	50.0%		4489	4489	1.67	7,496	21%	5,897		30.0%	54.6%	13.6%	1.1%	0.7%	1.08	1638	3,220	908	
Out	rooms	50.0%		4489	4489	1.67	7,496	15%	6,372		30.0%	54.6%	13.6%	1.1%	0.7%	1.08	1770	3,479	981	
Daily Office			2.94	21180	21180		23,934		22,907								8485	10,744	3,000	
In	7200	50.0%		10590	10590	1.13	11,967	2%	11,698		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	4333	5,487	1,532	
Out	ksf	50.0%		10590	10590	1.13	11,967	6%	11,209		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	4152	5,257	1,468	
Daily R&D			10.49	8389	8389		9,479		9,073								3360	4,255	1,189	
In	800	50.0%		4194	4194	1.13	4,740	2%	4,633		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	1716	2,173	607	
Out	ksf	50.0%		4194	4194	1.13	4,740	6%	4,439		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	1644	2,082	582	
Daily Shopping Center			31.55	23653	14030		24,974		19,104								4112	10,297	2,885	
In	750	50.0%		11831	7015	1.78	12,487	22%	9,740	699	31.0%	53.9%	13.3%	1.1%	0.7%	1.08	2110	5,250	1,471	685
Out	ksf	50.0%		11831	7015	1.78	12,487	25%	9,364	672	31.0%	53.9%	13.3%	1.1%	0.7%	1.08	2002	5,047	1,414	685
Total Daily				93265	83633		125242										34168	54256	20044	
In				46632	41816		62621										17110	27128	9993	
Out				46632	41816		62621										17058	27128	10051	
AM Mid-Rise Res			0.32	438	438		732		712								215	324	161	
In	1,349	26.0%		114	114	1.67	190	2%	187		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	56	85	42	
Out	units	74.0%		324	324	1.67	542	3%	525		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	159	239	119	
AM High-Rise Res			0.28	1524	1524		2,545		2,474								747	1,124	559	
In	5396	24.0%		366	366	1.67	611	2%	598		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	181	272	135	
Out	units	76.0%		1158	1158	1.67	1,934	3%	1,876		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	566	852	424	
AM CCRC			0.30	224	224		374		365								110	165	83	
In	755	53.0%		119	119	1.67	198	2%	194		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	59	88	44	
Out	units	47.0%		105	105	1.67	176	3%	170		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	51	77	39	
AM Hotel			0.49	411	411		687		510								142	278	78	
In	833	59.0%		243	243	1.67	405	0%	405		30.0%	54.6%	13.6%	1.1%	0.7%	1.08	113	221	62	
Out	rooms	41.0%		169	169	1.67	282	63%	105		30.0%	54.6%	13.6%	1.1%	0.7%	1.08	29	57	16	
AM Office			0.68	4910	4910		5,548		5,225								1935	2,450	685	
In	7200	88.0%		4321	4321	1.13	4,882	5%	4,641		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	1719	2,176	608	
Out	ksf	12.0%		589	589	1.13	666	12%	584		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	216	274	77	
AM R&D			0.81	647	647		731		686								254	322	90	
In	800	83.0%		537	537	1.13	607	5%	577		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	214	271	76	
Out	ksf	17.0%		110	110	1.13	124	12%	109		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	40	51	14	
AM Shopping Center			0.70	527	275		490		280								53	150	42	
In	750	62.0%		327	171	1.78	303	45%	167	16	31.0%	53.9%	13.3%	1.1%	0.7%	1.08	34	90	25	14
Out	ksf	38.0%		200	105	1.78	186	40%	112	11	31.0%	53.9%	13.3%	1.1%	0.7%	1.08	19	60	17	14
Total AM Peak Hour				8681	8429		11106										3456	4913	1698	
In				6025	5869		7197										2376	3203	992	
Out				2656	2560		3909										1080	1610	706	
PM Mid-Rise Res			0.40	539	539		899		754								228	342	171	
In	1,349	61.0%		329	329	1.67	549	17%	454		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	137	206	103	
Out	units	39.0%		210	210	1.67	351	14%	300		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	91	136	68	
PM High-Rise Res			0.34	1843	1843		3,078		2,581								779	1,171	583	
In	5,396	61.0%		1124	1124	1.67	1,878	17%	1,554		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	469	705	351	
Out	units	39.0%		719	719	1.67	1,200	14%	1,027		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	310	466	232	
PM CCRC			0.29	216	216		361		303								92	138	69	
In	755	50.0%		108	108	1.67	180	17%	149		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	45	68	34	
Out	units	50.0%		108	108	1.67	180	14%	154		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	47	70	35	
PM Hotel			0.72	599	599		1,000		852								237	465	131	
In	833	51.0%		305	305	1.67	510	24%	388		30.0%	54.6%	13.6%	1.1%	0.7%	1.08	108	212	60	
Out	rooms	49.0%		293	293	1.67	490	5%	464		30.0%	54.6%	13.6%	1.1%	0.7%	1.08	129	253	71	
PM Office			0.53	3851	3851		4,352		4,115								1524	1,930	539	
In	7,200	17.0%		655	655	1.13	740	11%	659		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	244	309	86	
Out	ksf	83.0%		3196	3196	1.13	3,612	4%	3,456		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	1280	1,621	453	
PM R&D			1.06	845	845		903		803								334	424	119	
In	800	16.0%		135	135	1.13	153	11%	136		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	50	64	18	
Out	ksf	84.0%		710	710	1.13	802	4%	767		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	284	360	101	
PM Shopping Center			3.22	2414	1506		2,681		1,963								372	1,057	296	
In	750	48.0%		1159	723	1.78	1,287	20%	1,029	100	31.0%	53.9%	13.3%	1.1%	0.7%	1.08	200	554	155	96
Out	ksf	52.0%		1255	783	1.78	1,394	33%	934	91	31.0%	53.9%	13.3%	1.1%	0.7%	1.08	172	503	141	96
Total PM Peak Hour				10306	9398		13325										3566	5527	1908	
In				3815	3379		5296										1253	2118	807	
Out				6491	6019		8029										2313	3409	1101	

Notes:

Trip Generation based on TE Trip Generation Manual, 10th Edition

LUC 221 - Mid-Rise Residential

LUC 222 - High-Rise Residential

LUC 255 - Continuing Care Retirement Community

LUC 310 - Hotel

LUC 710 - General Office, Northeast and Mid-Atlantic Region

LUC 760 - Research and Development Center

LUC 820 - Shopping Center

Auto Mode Share from North Point. See notes below for remain mode calcs.

VOR stands for Vehicle Occupancy Rate from 2009 NHTS

HVOR stands for High Vehicle Occupancy Rate from American Community Survey 2006-2010; Revere, Boston

Linked to Trip Rate Sheets

Mode Share Notes

Used North Point Auto mode split and VOR. Did not distinguish between SOV and HOV. The VOR is an overall ratio taking into account car pooling. Then found the different in % and proportional distributed between transit and walk/bike/other

**ITE TRIP GENERATION WORKSHEET**  
**(10th Edition, Updated 2017)**

**LANDUSE:** Mid-Rise Residential  
**LANDUSE CODE:** 221  
**SETTING/LOCATION:** General Urban/Suburban  
**JOB NAME:**  
**JOB NUMBER:**

Independent Variable --- Number of Units

1349 units

**WEEKDAY**

RATES:		# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
				Average	Low	High	Average	Low	High	Enter	Exit
	DAILY	27	0.77	5.44	1.27	12.50	205	21	494	50%	50%
	AM PEAK (ADJACENT ST)	53	0.67	0.36	0.06	1.61	207	26	703	26%	74%
	PM PEAK (ADJACENT ST)	60	0.72	0.44	0.15	1.11	208	26	703	61%	39%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	7,339	3,669	3,669	7,350	3,675	3,675
AM PEAK (ADJACENT ST)	486	126	359	438	114	324
PM PEAK (ADJACENT ST)	594	362	231	539	329	210

**ITE TRIP GENERATION WORKSHEET**  
**(10th Edition, Updated 2017)**

**LANDUSE:** High-Rise Residential  
**LANDUSE CODE:** 222  
**SETTING/LOCATION:** General Urban/Suburban  
**JOB NAME:**  
**JOB NUMBER:**

Independent Variable --- Number of Units

5396 units

**WEEKDAY**

RATES:		# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
				Average	Low	High	Average	Low	High	Enter	Exit
	DAILY	11	0.96	4.45	2.77	6.45	414	128	1,456	50%	50%
	AM PEAK (ADJACENT ST)	25	0.90	0.31	0.18	0.48	372	54	1,456	24%	76%
	PM PEAK (ADJACENT ST)	25	0.96	0.36	0.23	0.53	372	54	1,456	61%	39%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	24,012	12,006	12,006	21,472	10,736	10,736
AM PEAK (ADJACENT ST)	1,673	401	1,271	1,524	366	1,158
PM PEAK (ADJACENT ST)	1,943	1,185	758	1,843	1,124	719

**ITE TRIP GENERATION WORKSHEET**  
*(10th Edition, Updated 2017)*

**LANDUSE:** Continuing Car Retirement Community  
**LANDUSE CODE:** 255 Independent Variable --- Number of Units  
**SETTING/LOCATION:** General Urban/Suburban  
**JOB NAME:** 755 units  
**JOB NUMBER:**

**WEEKDAY**

RATES:		# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
				Average	Low	High	Average	Low	High	Enter	Exit
	DAILY	4	0.99	2.40	2.33	2.51	1,843	1,549	2,238	50%	50%
	AM PEAK (ADJACENT ST)	6	0.98	0.14	0.13	0.18	1,602	350	2,238	65%	35%
	PM PEAK (ADJACENT ST)	6	0.98	0.16	0.14	0.19	1,602	350	2,238	39%	61%

TRIPS:		BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
	DAILY	1,812	906	906	2,233	1,117	1,117
	AM PEAK (ADJACENT ST)	106	69	37	123	80	43
	PM PEAK (ADJACENT ST)	121	47	74	135	53	83



**ITE TRIP GENERATION WORKSHEET**  
*(10th Edition, Updated 2017)*

**LANDUSE:** Hotel  
**LANDUSE CODE:** 310  
**SETTING/LOCATION:** General Urban/Suburban  
**JOB NAME:**  
**JOB NUMBER:**

Independent Variable --- Number of Rooms

833 rooms

**WEEKDAY**

RATES:		# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
				Average	Low	High	Average	Low	High	Enter	Exit
	DAILY	6	0.92	8.36	5.31	9.53	146	100	260	50%	50%
	AM PEAK (ADJACENT ST)	25	0.85	0.47	0.20	0.84	178	74	426	59%	41%
	PM PEAK (ADJACENT ST)	28	0.80	0.60	0.26	1.06	183	74	426	51%	49%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	6,964	3,482	3,482	8,978	4,489	4,489
AM PEAK (ADJACENT ST)	392	231	161	411	243	169
PM PEAK (ADJACENT ST)	500	255	245	599	305	293

**ITE TRIP GENERATION WORKSHEET**  
**(10th Edition, Updated 2017)**

**LANDUSE:** General Office Building  
**LANDUSE CODE:** 710 Independent Variable ---  
**SETTING/LOCATION:** General Urban/Suburban- ATL/NE Region  
**JOB NAME:**  
**JOB NUMBER:** **FLOOR AREA (KSF):** 7200

**WEEKDAY**

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	37 of 66	0.71	8.72	3.58	26.79	203	27	1,300	50%	50%
AM PEAK OF GENERATOR	111 of 228	0.78	1.55	0.63	4.93	200	14	1,300	88%	12%
PM PEAK OF GENERATOR	110 of 243	0.74	1.45	0.49	6.20	201	14	1,300	17%	83%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	62,784	31,392	31,392	21,180	10,590	10,590
AM PEAK OF GENERATOR	11,160	9,821	1,339	4,910	4,321	589
PM PEAK OF GENERATOR	10,440	1,775	8,665	3,851	655	3,196

**ITE TRIP GENERATION WORKSHEET**  
*(10th Edition, Updated 2017)*

**LANDUSE:** Research and Development Center  
**LANDUSE CODE:** 760 Independent Variable ---  
**SETTING/LOCATION:** General Urban/Suburban  
**JOB NAME:**  
**JOB NUMBER:** **FLOOR AREA (KSF):** 800

**WEEKDAY**

RATES:		# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
				Average	Low	High	Average	Low	High	Enter	Exit
	DAILY	24	0.89	11.26	3.48	24.95	200	22	705	50%	50%
	AM PEAK (ADJACENT ST)	11	--	0.42	0.17	2.19	111	10	260	75%	25%
	PM PEAK (ADJACENT ST)	5	0.65	0.49	0.26	1.35	108	25	200	15%	85%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	9,008	4,504	4,504	8,389	4,194	4,194
AM PEAK (ADJACENT ST)	336	252	84	N/A	N/A	N/A
PM PEAK (ADJACENT ST)	392	59	333	110	16	93

**ITE TRIP GENERATION WORKSHEET**  
*(10th Edition, Updated 2017)*

**LANDUSE:** Shopping Center  
**LANDUSE CODE:** 820  
**SETTING/LOCATION:** General Urban/Suburban  
**JOB NAME:**  
**JOB NUMBER:**

Independent Variable ---

**FLOOR AREA (KSF):** 750

**WEEKDAY**

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	147	0.76	37.75	7.42	207.98	453	9	1,510	50%	50%
AM PEAK (ADJACENT ST)	84	0.90	0.94	0.18	23.74	351	9	1,510	62%	38%
PM PEAK (ADJACENT ST)	261	0.82	3.81	0.74	18.69	327	2	2,200	48%	52%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	28,313	14,156	14,156	23,663	11,831	11,831
AM PEAK (ADJACENT ST)	705	437	268	527	327	200
PM PEAK (ADJACENT ST)	2,858	1,372	1,486	2,414	1,159	1,255

Suffolk Downs  
Trip Generation Estimate  
November 2017

Suffolk Downs Redevelopment Estimated Trip Generation - Summary of Program B

	Distributi		Trip Rate	Unadjusted Vehicle Trips	Net Unadjusted Vehicle Trips	VOR	Person Trips	Internal Capture	Adjusted Person Trips	Pass-by Trips	SOV/HOV	Transit Share	Walk	Bike	Other	HVOR	Adjusted Vehicle Trips	Transit Trips	Walk/Bike/Other	
	Size	on																	Trips	Avg Pass-by Trips
Daily Mid-Rise Res			5.45	9852	9852		16,453		15,891							4797	7,215	3,591		
In	1,808	50.0%		4926	4926	1.67	8,226	4%	7,891		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	2382	3,583	1,783	
Out	units	50.0%		4926	4926	1.67	8,226	3%	8,000		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	2415	3,632	1,808	
Daily High-Rise Res			3.97	28698	28698		47,926		46,289							13974	21,015	10,461		
In	7230	50.0%		14349	14349	1.67	23,963	4%	22,986		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	6939	10,436	5,195	
Out	units	50.0%		14349	14349	1.67	23,963	3%	23,302		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	7035	10,579	5,266	
Daily CCRC			2.75	2649	2649		4,424		4,273							1290	1,940	966		
In	962	50.0%		1325	1325	1.67	2,212	4%	2,122		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	641	963	480	
Out	units	50.0%		1325	1325	1.67	2,212	3%	2,151		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	649	977	486	
Daily Hotel			10.65	7103	7103		11,863		9,578							2660	5,230	1,475		
In	667	50.0%		3552	3552	1.67	5,931	23%	4,594		30.0%	54.6%	13.6%	1.1%	0.7%	1.08	1276	2,509	708	
Out	rooms	50.0%		3552	3552	1.67	5,931	16%	4,983		30.0%	54.6%	13.6%	1.1%	0.7%	1.08	1384	2,721	767	
Daily Office			3.38	15972	15972		18,049		17,190							6367	8,063	2,252		
In	4725	50.0%		7986	7986	1.13	9,024	3%	8,790		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	3256	4,123	1,152	
Out	ksf	50.0%		7986	7986	1.13	9,024	7%	8,400		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	3111	3,940	1,100	
Daily R&D			10.62	5575	5575		6,300		6,001							2222	2,814	786		
In	525	50.0%		2788	2788	1.13	3,150	3%	3,068		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	1136	1,439	402	
Out	ksf	50.0%		2788	2788	1.13	3,150	7%	2,932		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	1086	1,375	384	
Daily Shopping Center			33.03	21468	21468		21,069		16,118							3469	8,687	2,434		
In	650	50.0%		10734	5918	1.78	10,534	22%	8,217	590	31.0%	53.9%	13.3%	1.1%	0.7%	1.08	1780	4,429	1,241	578
Out	ksf	50.0%		10734	5918	1.78	10,534	25%	7,900	567	31.0%	53.9%	13.3%	1.1%	0.7%	1.08	1689	4,258	1,193	578
Total Daily				91319	81687		126083									34779	54964	21965		
In				45659	40843		63041									17410	27482	10961		
Out				45659	40843		63041									17369	27482	11004		
AM Mid-Rise Res			0.32	584	584		975		950							286	431	214		
In	1,808	26.0%		152	152	1.67	254	2%	249		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	75	113	56	
Out	units	74.0%		432	432	1.67	722	3%	700		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	211	318	158	
AM High-Rise Res			0.28	2037	2037		3,402		3,311							999	1,504	749		
In	7230	24.0%		489	489	1.67	817	2%	803		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	242	365	182	
Out	units	76.0%		1548	1548	1.67	2,586	3%	2,508		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	757	1,139	567	
AM CCRC			0.26	249	249		415		406							122	184	92		
In	962	53.0%		132	132	1.67	220	2%	217		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	65	98	49	
Out	units	47.0%		117	117	1.67	195	3%	189		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	57	86	43	
AM Hotel			0.49	328	328		548		420							117	230	65		
In	667	59.0%		194	194	1.67	323	0%	323		30.0%	54.6%	13.6%	1.1%	0.7%	1.08	90	177	50	
Out	rooms	41.0%		135	135	1.67	225	57%	97		30.0%	54.6%	13.6%	1.1%	0.7%	1.08	27	53	15	
AM Office			0.75	3550	3550		4,011		3,737							1384	1,752	489		
In	4725	88.0%		3124	3124	1.13	3,530	6%	3,323		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	1231	1,558	435	
Out	ksf	12.0%		426	426	1.13	481	14%	414		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	153	194	54	
AM R&D			0.85	447	447		505		468							173	220	62		
In	525	83.0%		371	371	1.13	419	6%	394		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	146	185	52	
Out	ksf	17.0%		76	76	1.13	86	14%	74		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	27	35	10	
AM Shopping Center			0.73	477	225		401		212							40	114	32		
In	650	62.0%		296	140	1.78	248	50%	124	12	31.0%	53.9%	13.3%	1.1%	0.7%	1.08	25	67	19	10
Out	ksf	38.0%		181	86	1.78	152	43%	87	9	31.0%	53.9%	13.3%	1.1%	0.7%	1.08	15	47	13	10
Total AM Peak Hour				7672	7420		10258									3121	4435	1703		
In				4756	4600		5811									1874	2563	843		
Out				2915	2819		4447									1247	1872	860		
PM Mid-Rise Res			0.39	713	713		1,191		1,064							321	483	241		
In	1,808	61.0%		435	435	1.67	727	11%	649		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	196	295	147	
Out	units	39.0%		278	278	1.67	465	11%	414		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	125	188	94	
PM High-Rise Res			0.34	2467	2467		4,119		3,679							1111	1,671	832		
In	7,230	61.0%		1505	1505	1.67	2,513	11%	2,246		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	678	1,020	508	
Out	units	39.0%		962	962	1.67	1,607	11%	1,433		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	433	651	324	
PM CCRC			0.28	266	266		444		396							120	180	90		
In	962	50.0%		133	133	1.67	222	11%	198		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	60	90	45	
Out	units	50.0%		133	133	1.67	222	11%	198		32.0%	45.4%	20.4%	1.4%	0.8%	1.06	60	90	45	
PM Hotel			0.71	474	474		792		664							185	363	102		
In	667	51.0%		242	242	1.67	404	26%	298		30.0%	54.6%	13.6%	1.1%	0.7%	1.08	83	163	46	
Out	rooms	49.0%		232	232	1.67	388	6%	366		30.0%	54.6%	13.6%	1.1%	0.7%	1.08	102	200	56	
PM Office			0.60	2856	2856		3,227		3,005							1113	1,409	393		
In	4,725	17.0%		485	485	1.13	549	18%	451		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	167	212	59	
Out	ksf	83.0%		2370	2370	1.13	2,678	5%	2,553		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	946	1,197	334	
PM R&D			1.06	559	559		632		589							218	276	77		
In	525	16.0%		89	89	1.13	101	18%	83		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	31	39	11	
Out	ksf	84.0%		469	469	1.13	530	5%	506		40.0%	46.9%	11.3%	1.1%	0.7%	1.08	187	237	66	
PM Shopping Center			3.34	2171	1263		2,249		1,648							312	888	248		
In	650	48.0%		1042	606	1.78	1,080	20%	864	84	31.0%	53.9%	13.3%	1.1%	0.7%	1.08	167	465	130	80
Out	ksf	52.0%		1129	657	1.78	1,169	33%	784	77	31.0%	53.9%	13.3%	1.1%	0.7%	1.08	145	423	118	80
Total PM Peak Hour				9505	8598		12654									3380	5270	1983		
In				3931	3496		5594									1382	2284	946		
Out				5574	5102		7059									1998	2986	1037		

Notes:  
Trip Generation based on *ITE Trip Generation Manual* , 10th Edition  
LUC 221 - Mid-Rise Residential  
LUC 222 - High-Rise Residential  
LUC 255 - Continuing Care Retirement Community  
LUC 310 - Hotel  
LUC 710 - General Office\_Northeast and Mid-Atlantic Region  
LUC 760 - Research and Development Center  
LUC 820 - Shopping Center  
Auto Mode Share from North Point. See notes below for remain mode calcs.  
VOR stands for Vehicle Occupancy Rate from 2009 NHTS  
HVOR stands for High Vehicle Occupancy Rate from American Community Survey 2006-2010; Revere, Boston  
[Linked to Trip Rate Sheets](#)

**Mode Share Notes**  
Used North Point Auto mode split and VOR. Did not distriguish between SOV and HOV. The VOR is an overall ratio taking into account car pooling. Then found the different in % and proporational distributed between transit and walk/bike/other

**ITE TRIP GENERATION WORKSHEET**  
*(10th Edition, Updated 2017)*

**LANDUSE:** Mid-Rise Residential  
**LANDUSE CODE:** 221  
**SETTING/LOCATION:** General Urban/Suburban  
**JOB NAME:**  
**JOB NUMBER:**

Independent Variable --- Number of Units

1808 units

**WEEKDAY**

RATES:		# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
				Average	Low	High	Average	Low	High	Enter	Exit
	DAILY	27	0.77	5.44	1.27	12.50	205	21	494	50%	50%
	AM PEAK (ADJACENT ST)	53	0.67	0.36	0.06	1.61	207	26	703	26%	74%
	PM PEAK (ADJACENT ST)	60	0.72	0.44	0.15	1.11	208	26	703	61%	39%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	9,836	4,918	4,918	9,852	4,926	4,926
AM PEAK (ADJACENT ST)	651	169	482	584	152	432
PM PEAK (ADJACENT ST)	796	485	310	713	435	278

**ITE TRIP GENERATION WORKSHEET**  
*(10th Edition, Updated 2017)*

**LANDUSE:** High-Rise Residential  
**LANDUSE CODE:** 222  
**SETTING/LOCATION:** General Urban/Suburban  
**JOB NAME:**  
**JOB NUMBER:**

Independent Variable --- Number of Units

7230 units

**WEEKDAY**

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	11	0.96	4.45	2.77	6.45	414	128	1,456	50%	50%
AM PEAK (ADJACENT ST)	25	0.90	0.31	0.18	0.48	372	54	1,456	24%	76%
PM PEAK (ADJACENT ST)	25	0.96	0.36	0.23	0.53	372	54	1,456	61%	39%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	32,174	16,087	16,087	28,698	14,349	14,349
AM PEAK (ADJACENT ST)	2,241	538	1,703	2,037	489	1,548
PM PEAK (ADJACENT ST)	2,603	1,588	1,015	2,467	1,505	962

**ITE TRIP GENERATION WORKSHEET**  
*(10th Edition, Updated 2017)*

**LANDUSE:** Continuing Car Retirement Community  
**LANDUSE CODE:** 255 Independent Variable --- Number of Units  
**SETTING/LOCATION:** General Urban/Suburban  
**JOB NAME:** \_\_\_\_\_ 962 units  
**JOB NUMBER:** \_\_\_\_\_

**WEEKDAY**

RATES:		# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
				Average	Low	High	Average	Low	High	Enter	Exit
	DAILY	4	0.99	2.40	2.33	2.51	1,843	1,549	2,238	50%	50%
	AM PEAK (ADJACENT ST)	6	0.98	0.14	0.13	0.18	1,602	350	2,238	65%	35%
	PM PEAK (ADJACENT ST)	6	0.98	0.16	0.14	0.19	1,602	350	2,238	39%	61%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	2,309	1,154	1,154	2,649	1,325	1,325
AM PEAK (ADJACENT ST)	135	88	47	151	98	53
PM PEAK (ADJACENT ST)	154	60	94	168	65	102



**(10th Edition, Updated 2017)**

Independent Variable --- Number of Rooms

667 rooms

RATES:			Total Trip Ends			Independent Variable Range			Directional Distribution	
	# Studies	R^2	Average	Low	High	Average	Low	High	Enter	Exit
DAILY	6	0.92	8.36	5.31	9.53	146	100	260	50%	50%
AM PEAK (ADJACENT ST)	25	0.85	0.47	0.20	0.84	178	74	426	59%	41%
PM PEAK (ADJACENT ST)	28	0.80	0.60	0.26	1.06	183	74	426	51%	49%

TRIPS:			BY AVERAGE			BY REGRESSION		
			Total	Enter	Exit	Total	Enter	Exit
DAILY			5,576	2,788	2,788	7,103	3,552	3,552
AM PEAK (ADJACENT ST)			313	185	129	328	194	135
PM PEAK (ADJACENT ST)			400	204	196	474	242	232

**ITE TRIP GENERATION WORKSHEET**  
**(10th Edition, Updated 2017)**

**LANDUSE:** General Office Building  
**LANDUSE CODE:** 710 Independent Variable ---  
**SETTING/LOCATION:** General Urban/Suburban- ATL/NE Region  
**JOB NAME:**  
**JOB NUMBER:**  
**FLOOR AREA (KSF):** 4725

**WEEKDAY**

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	37 of 66	0.71	8.72	3.58	26.79	203	27	1,300	50%	50%
AM PEAK OF GENERATOR	111 of 228	0.78	1.55	0.63	4.93	200	14	1,300	88%	12%
PM PEAK OF GENERATOR	110 of 243	0.74	1.45	0.49	6.20	201	14	1,300	17%	83%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	41,202	20,601	20,601	15,972	7,986	7,986
AM PEAK OF GENERATOR	7,324	6,445	879	3,550	3,124	426
PM PEAK OF GENERATOR	6,851	1,165	5,687	2,856	485	2,370

**ITE TRIP GENERATION WORKSHEET**  
*(10th Edition, Updated 2017)*

**LANDUSE:** Research and Development Center  
**LANDUSE CODE:** 760 Independent Variable ---  
**SETTING/LOCATION:** General Urban/Suburban  
**JOB NAME:**  
**JOB NUMBER:** **FLOOR AREA (KSF):** 525

**WEEKDAY**

RATES:		# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
				Average	Low	High	Average	Low	High	Enter	Exit
	DAILY	24	0.89	11.26	3.48	24.95	200	22	705	50%	50%
	AM PEAK (ADJACENT ST)	11	--	0.42	0.17	2.19	111	10	260	75%	25%
	PM PEAK (ADJACENT ST)	5	0.65	0.49	0.26	1.35	108	25	200	15%	85%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	5,912	2,956	2,956	5,575	2,788	2,788
AM PEAK (ADJACENT ST)	221	165	55	N/A	N/A	N/A
PM PEAK (ADJACENT ST)	257	39	219	95	14	81

**ITE TRIP GENERATION WORKSHEET**  
**(10th Edition, Updated 2017)**

**LANDUSE:** Shopping Center  
**LANDUSE CODE:** 820 Independent Variable ---  
**SETTING/LOCATION:** General Urban/Suburban  
**JOB NAME:**  
**JOB NUMBER:** **FLOOR AREA (KSF):** 650

**WEEKDAY**

RATES:		# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
				Average	Low	High	Average	Low	High	Enter	Exit
	DAILY	147	0.76	37.75	7.42	207.98	453	9	1,510	50%	50%
	AM PEAK (ADJACENT ST)	84	0.90	0.94	0.18	23.74	351	9	1,510	62%	38%
	PM PEAK (ADJACENT ST)	261	0.82	3.81	0.74	18.69	327	2	2,200	48%	52%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	24,538	12,269	12,269	21,468	10,734	10,734
AM PEAK (ADJACENT ST)	611	379	232	477	296	181
PM PEAK (ADJACENT ST)	2,477	1,189	1,288	2,171	1,042	1,129

**Suffolk Downs**  
**Trip Generation Estimate**  
**November 2017**

**Suffolk Downs Redevelopment Estimated Trip Generation - Summary of Phase 1 Waiver**

	Size	Distributi on	Trip Rate	Unadjusted Vehicle Trips	Net Unadjusted Vehicle Trips	VOR	Person Trips	Internal Capture	Adjusted Person Trips	Pass-by Trips	SOV	HOV	Transit Share	Walk	Bike	Other	HVOR	Adjusted Vehicle Trips	Transit Trips	Walk/Bike/Other Trips	Avg Pass-by Trips
Daily CorpHeadquarters			5.34	2775	2775		3,135		3,135									1492	1,176	330	
In	520	50.0%		1387	1387	1.13	1,568	0%	1,568		44.4%	7.6%	37.5%	8.7%	1.1%	0.7%	2.39	746	588	165	
Out	ksf	50.0%		1387	1387	1.13	1,568	0%	1,568		44.4%	7.6%	37.5%	8.7%	1.1%	0.7%	2.39	746	588	165	
In				1387	1387		1568	0	1568									746	588	165	
Out				1387	1387		1568	0	1568									746	588	165	
AM CorpHeadquarters			1.28	667	667		754		754									359	283	80	
In	520	93.0%		621	621	1.13	701	0%	701		44.4%	7.6%	37.5%	8.7%	1.1%	0.7%	2.39	334	263	74	
Out	ksf	7.0%		47	47	1.13	53	0%	53		44.4%	7.6%	37.5%	8.7%	1.1%	0.7%	2.39	25	20	6	
Total AM Peak Hour				667	667		754	0	754									359	283	80	
In				621	621		701	0	701									334	263	74	
Out				47	47		53	0	53									25	20	6	
AM CorpHeadquarters			1.10	572	572		647		647									308	242	68	
In	520	10.0%		57	57	1.13	65	0%	65		44.4%	7.6%	37.5%	8.7%	1.1%	0.7%	2.39	31	24	7	
Out	ksf	90.0%		515	515	1.13	582	0%	582		44.4%	7.6%	37.5%	8.7%	1.1%	0.7%	2.39	277	218	61	
Total PM Peak Hour				572	572		647	0	647									308	242	68	
In				57	57		65	0	65									31	24	7	
Out				515	515		582	0	582									277	218	61	

**Notes:**

Trip Generation based on *ITE Trip Generation Manual*, 9th Edition, using:

LUC 220 - Apartment

LUC 230 - Condo

LUC 255 - Continuing Care Retirement Community

LUC 310 - Hotel

LUC 710 - General Office

LUC 760 - Research and Development Center

LUC 820 - Shopping Center

Mode shares from American Community Survey 2006-2010; Census Tract 511.01, 1707.01, 1708, 9815.02, and 9816

VOR stands for Vehicle Occupancy Rate from 2009 NHTS

HVOR stands for High Vehicle Occupancy Rate from American Community Survey 2006-2010

**ITE TRIP GENERATION WORKSHEET**  
**(10th Edition, Updated 2017)**

**LANDUSE:** Corporate Headquarters Building  
**LANDUSE CODE:** 714 Independent Variable ---  
**SETTING/LOCATION:** General Urban/Suburban  
**JOB NAME:**  
**JOB NUMBER:** **FLOOR AREA (KSF):** 520

**WEEKDAY**

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	7	0.81	7.95	5.87	12.39	258	82	902	50%	50%
AM PEAK OF GENERATOR	20	0.69	1.46	0.46	3.01	297	82	902	93%	7%
PM PEAK OF GENERATOR	21	0.78	1.40	0.52	2.54	295	82	902	10%	90%

**TRIPS:**

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	4,134	2,067	2,067	3,666	1,833	1,833
AM PEAK OF GENERATOR	759	706	53	667	621	47
PM PEAK OF GENERATOR	728	73	655	679	68	611

# Intersection Capacity Analysis

Existing Consition Results






















No-Build Conditions Results

Phase 1 Project Condition Results

Phase 1 Project Condition with Mititigation Results

13796.00 :: Suffolk Downs Redevelopment  
6: Route 1A & Boardman St

2017 Existing Conditions  
Evening Peak Hour













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	40	15	115	415	60	100	45	85	995	120	85	2355
Future Volume (vph)	40	15	115	415	60	100	45	85	995	120	85	2355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	12	12	10	10	12	11	11	11	11	11
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	130		0	0		250		400		500	380	
Storage Lanes	1		0	0		1		1		1	1	
Taper Length (ft)	25			25				25			25	
Satd. Flow (prot)	1504	1475	0	0	1641	1436	0	1517	3172	1446	1544	3292
Flt Permitted	0.154				0.408			0.950			0.950	
Satd. Flow (perm)	244	1475	0	0	699	1436	0	1517	3172	1446	1544	3292
Right Turn on Red			Yes			No				Yes		
Satd. Flow (RTOR)		115								128		1
Link Speed (mph)		30			30				30			30
Link Distance (ft)		537			1355				733			925
Travel Time (s)		12.2			30.8				16.7			21.0
Confl. Peds. (#/hr)	22					22						
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.88	0.88	0.88	0.94	0.94	0.94	0.94	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	12%	0%	9%	4%	0%	5%	2%	22%	10%	8%	13%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	8
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	44	142	0	0	540	114	0	138	1059	128	89	2484
Turn Type	Perm	NA		Perm	NA	pt+ov	Prot	Prot	NA	Prot	Prot	NA
Protected Phases		8			4	4 5	1	1	6	6	5	2
Permitted Phases	8			4								
Detector Phase	8	8		4	4	4 5	1	1	6	6	5	2
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		6.0	6.0	20.0	20.0	6.0	20.0
Minimum Split (s)	26.0	26.0		12.0	12.0		12.0	12.0	27.0	27.0	13.5	31.0
Total Split (s)	31.0	31.0		18.0	18.0		31.0	31.0	137.0	137.0	32.5	137.0
Total Split (%)	15.5%	15.5%		9.0%	9.0%		15.5%	15.5%	68.3%	68.3%	16.2%	68.3%
Yellow Time (s)	3.0	3.0		4.0	4.0		4.0	4.0	5.0	5.0	5.5	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	5.0	5.0			6.0			5.0	6.0	6.0	6.5	6.0
Lead/Lag							Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	None	Min	Min	None	Min
Act Effect Green (s)	26.0	26.0			25.0	48.1		21.9	134.8	134.8	16.6	131.0
Actuated g/C Ratio	0.13	0.13			0.13	0.25		0.11	0.69	0.69	0.09	0.67
v/c Ratio	1.38	0.48			6.07	0.32		0.81	0.48	0.12	0.68	1.12
Control Delay	346.6	24.8			2308.7	62.5		117.6	15.2	1.8	111.4	92.5
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	346.6	24.8			2308.7	62.5		117.6	15.2	1.8	111.4	92.5



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	30
Future Volume (vph)	30
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Growth Factor	100%
Heavy Vehicles (%)	13%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effect Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

13796.00 :: Suffolk Downs Redevelopment  
6: Route 1A & Boardman St

2017 Existing Conditions  
Evening Peak Hou

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
LOS	F	C			F	E		F	B	A	F	F
Approach Delay		100.9			1917.2				24.6			93.2
Approach LOS		F			F				C			F
Queue Length 50th (ft)	~74	31			~1324	122		176	314	0	114	~1952
Queue Length 95th (ft)	#176	113			#1558	180		264	405	26	182	#2095
Internal Link Dist (ft)		457			1275				653			845
Turn Bay Length (ft)	130					250		400		500	380	
Base Capacity (vph)	32	296			89	423		202	2193	1039	205	2239
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	1.38	0.48			6.07	0.27		0.68	0.48	0.12	0.43	1.11

Intersection Summary

Area Type: Other

Cycle Length: 200.5

Actuated Cycle Length: 194.9

Natural Cycle: 130

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 6.07

Intersection Signal Delay: 326.1

Intersection LOS: F

Intersection Capacity Utilization 125.6%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Route 1A & Boardman St

 Ø1	 Ø2	 Ø4
31 s	137 s	18 s
 Ø5	 Ø6	 Ø8
32.5 s	137 s	31 s
























Lane Group	SBR
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

13796.00 :: Suffolk Downs Redevelopment  
6: Route 1A & Boardman St

2017 Existing Conditions

Evening Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	40	15	115	415	60	100	45	85	995	120	85	2355
Future Volume (vph)	40	15	115	415	60	100	45	85	995	120	85	2355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	12	12	10	10	12	11	11	11	11	11
Total Lost time (s)	5.0	5.0			6.0	6.0		5.0	6.0	6.0	6.5	6.0
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00	0.95	1.00	1.00	0.95
Frpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87			1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00			0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1504	1474			1642	1436		1517	3172	1446	1544	3292
Flt Permitted	0.15	1.00			0.41	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	244	1474			698	1436		1517	3172	1446	1544	3292
Peak-hour factor, PHF	0.91	0.91	0.91	0.88	0.88	0.88	0.94	0.94	0.94	0.94	0.96	0.96
Adj. Flow (vph)	44	16	126	472	68	114	48	90	1059	128	89	2453
RTOR Reduction (vph)	0	100	0	0	0	0	0	0	0	39	0	0
Lane Group Flow (vph)	44	42	0	0	540	114	0	138	1059	89	89	2484
Confl. Peds. (#/hr)	22					22						
Heavy Vehicles (%)	12%	0%	9%	4%	0%	5%	2%	22%	10%	8%	13%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	8
Turn Type	Perm	NA		Perm	NA	pt+ov	Prot	Prot	NA	Prot	Prot	NA
Protected Phases		8			4	4 5	1	1	6	6	5	2
Permitted Phases	8			4								
Actuated Green, G (s)	26.0	26.0			25.0	46.6		20.9	133.9	133.9	15.6	130.1
Effective Green, g (s)	26.0	26.0			25.0	46.6		21.9	134.9	134.9	16.6	131.1
Actuated g/C Ratio	0.13	0.13			0.13	0.24		0.11	0.69	0.69	0.09	0.67
Clearance Time (s)	5.0	5.0			6.0			6.0	7.0	7.0	7.5	7.0
Vehicle Extension (s)	2.0	2.0			2.0			2.0	4.0	4.0	2.0	4.0
Lane Grp Cap (vph)	32	196			89	343		170	2194	1000	131	2213
v/s Ratio Prot		0.03				0.08		c0.09	c0.33	0.06	0.06	c0.75
v/s Ratio Perm	0.18				c0.77							
v/c Ratio	1.38	0.22			6.07	0.33		0.81	0.48	0.09	0.68	1.12
Uniform Delay, d1	84.5	75.4			85.0	61.3		84.5	13.9	9.9	86.6	32.0
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	0.99
Incremental Delay, d2	289.1	0.2			2304.3	0.2		23.5	0.2	0.1	10.5	61.7
Delay (s)	373.6	75.6			2389.3	61.5		108.1	14.1	9.9	97.3	93.4
Level of Service	F	E			F	E		F	B	A	F	F
Approach Delay (s)		146.1			1983.5				23.5			93.6
Approach LOS		F			F				C			F
<b>Intersection Summary</b>												
HCM 2000 Control Delay			336.9				HCM 2000 Level of Service		F			
HCM 2000 Volume to Capacity ratio			1.80									
Actuated Cycle Length (s)			195.0				Sum of lost time (s)		19.5			
Intersection Capacity Utilization			125.6%				ICU Level of Service		H			
Analysis Period (min)			15									
















c Critical Lane Group













Movement	SBR
Lane Configurations	
Traffic Volume (vph)	30
Future Volume (vph)	30
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.96
Adj. Flow (vph)	31
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Heavy Vehicles (%)	13%
Bus Blockages (#/hr)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

13796.00 :: Suffolk Downs Redevelopment  
9: Route 1A & Jughandle

2017 Existing Conditions

Evening Peak Hou

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	15	5	0	0	0	0	1110	5	0	2200	0
Future Volume (vph)	50	15	5	0	0	0	0	1110	5	0	2200	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	12	12	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1505	0	0	0	0	0	3219	0	0	3323	0
Flt Permitted		0.966										
Satd. Flow (perm)	0	1505	0	0	0	0	0	3219	0	0	3323	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3						1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		122			363			405			225	
Travel Time (s)		2.8			8.3			9.2			5.1	
Confl. Peds. (#/hr)			1	1					2	2		
Confl. Bikes (#/hr)												
Peak Hour Factor	0.81	0.81	0.81	0.25	0.25	0.25	0.92	0.92	0.92	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	20%	93%	33%	2%	2%	2%	0%	8%	80%	0%	5%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	0	0	0	0	0	1212	0	0	2268	0
Turn Type	Perm	NA						NA			NA	
Protected Phases		2						1			1	
Permitted Phases	2											
Detector Phase	2	2						1			1	
Switch Phase												
Minimum Initial (s)	10.0	10.0						20.0			20.0	
Minimum Split (s)	16.0	16.0						27.0			27.0	
Total Split (s)	36.0	36.0						55.0			55.0	
Total Split (%)	39.6%	39.6%						60.4%			60.4%	
Yellow Time (s)	4.0	4.0						5.0			5.0	
All-Red Time (s)	2.0	2.0						2.0			2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.0						7.0			7.0	
Lead/Lag	Lag	Lag						Lead			Lead	
Lead-Lag Optimize?												
Recall Mode	None	None						Max			Max	
Act Effct Green (s)		11.2						52.6			52.6	
Actuated g/C Ratio		0.16						0.73			0.73	
v/c Ratio		0.37						0.52			0.93	
Control Delay		31.3						6.9			21.8	
Queue Delay		0.0						0.0			0.0	
Total Delay		31.3						6.9			21.8	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		C						A			C	
Approach Delay		31.3						6.9			21.8	
Approach LOS		C						A			C	
Queue Length 50th (ft)		34						122			~467	
Queue Length 95th (ft)		65						202			#761	
Internal Link Dist (ft)		42			283			325			145	
Turn Bay Length (ft)												
Base Capacity (vph)		629						2350			2426	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.14						0.52			0.93	

**Intersection Summary**

Area Type: Other

Cycle Length: 91

Actuated Cycle Length: 72

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 17.0

Intersection LOS: B

Intersection Capacity Utilization 80.0%

ICU Level of Service D

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
















Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 9: Route 1A &amp; Jughandle










												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	15	5	0	0	0	0	1110	5	0	2200	0
Future Volume (vph)	50	15	5	0	0	0	0	1110	5	0	2200	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	16	16	16	12	12	12	11	11	11	11	11	11
Total Lost time (s)		6.0						7.0			7.0	
Lane Util. Factor		1.00						0.95			0.95	
Frpb, ped/bikes		1.00						1.00			1.00	
Flpb, ped/bikes		1.00						1.00			1.00	
Frt		0.99						1.00			1.00	
Flt Protected		0.97						1.00			1.00	
Satd. Flow (prot)		1504						3220			3323	
Flt Permitted		0.97						1.00			1.00	
Satd. Flow (perm)		1504						3220			3323	
Peak-hour factor, PHF	0.81	0.81	0.81	0.25	0.25	0.25	0.92	0.92	0.92	0.97	0.97	0.97
Adj. Flow (vph)	62	19	6	0	0	0	0	1207	5	0	2268	0
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	84	0	0	0	0	0	1212	0	0	2268	0
Confl. Peds. (#/hr)			1	1					2	2		
Heavy Vehicles (%)	20%	93%	33%	2%	2%	2%	0%	8%	80%	0%	5%	0%
Turn Type	Perm	NA						NA			NA	
Protected Phases		2						1			1	
Permitted Phases	2											
Actuated Green, G (s)		9.1						51.1			51.1	
Effective Green, g (s)		9.1						51.1			51.1	
Actuated g/C Ratio		0.12						0.70			0.70	
Clearance Time (s)		6.0						7.0			7.0	
Vehicle Extension (s)		4.0						4.0			4.0	
Lane Grp Cap (vph)		186						2247			2319	
v/s Ratio Prot								0.38			c0.68	
v/s Ratio Perm		0.06										
v/c Ratio		0.45						0.54			0.98	
Uniform Delay, d1		29.7						5.4			10.5	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		2.4						0.9			14.2	
Delay (s)		32.1						6.3			24.7	
Level of Service		C						A			C	
Approach Delay (s)		32.1			0.0			6.3			24.7	
Approach LOS		C			A			A			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			18.6				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.90									
Actuated Cycle Length (s)			73.2				Sum of lost time (s)			13.0		
Intersection Capacity Utilization			80.0%				ICU Level of Service			D		
Analysis Period (min)			15									
c Critical Lane Group												



13796.00 :: Suffolk Downs Redevelopment  
 11: Route 1A on-ramp & Route 145

2017 Existing Conditions  
 Evening Peak Hou

							
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↔	↑↑↑		
Traffic Volume (vph)	1045	235	30	280	1385	0	0
Future Volume (vph)	1045	235	30	280	1385	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	9	11	12	12
Grade (%)	0%				0%	0%	
Storage Length (ft)		500		130		0	0
Storage Lanes		0		1		0	0
Taper Length (ft)				25		25	
Satd. Flow (prot)	4683	0	0	1590	4855	0	0
Flt Permitted				0.950			
Satd. Flow (perm)	4683	0	0	1586	4855	0	0
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	164						
Link Speed (mph)	30				30	30	
Link Distance (ft)	572				1857	345	
Travel Time (s)	13.0				42.2	7.8	
Confl. Peds. (#/hr)		7	2	7			
Confl. Bikes (#/hr)							
Peak Hour Factor	0.94	0.94	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	6%	4%	2%	3%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	2	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%				0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1362	0	0	323	1443	0	0
Turn Type	NA		Prot	Prot	NA		
Protected Phases	2		1	1	1 2		
Permitted Phases							
Detector Phase	2		1	1	1 2		
Switch Phase							
Minimum Initial (s)	8.0		8.0	8.0			
Minimum Split (s)	13.0		13.0	13.0			
Total Split (s)	24.0		17.0	17.0			
Total Split (%)	58.5%		41.5%	41.5%			
Yellow Time (s)	3.5		3.5	3.5			
All-Red Time (s)	1.5		1.5	1.5			
Lost Time Adjust (s)	0.0			0.0			
Total Lost Time (s)	5.0			5.0			
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?							
Recall Mode	Min		None	None			
Act Effect Green (s)	19.0			11.6	40.6		
Actuated g/C Ratio	0.47			0.29	1.00		
v/c Ratio	0.60			0.71	0.30		
Control Delay	8.4			24.6	0.2		
Queue Delay	0.0			0.0	0.0		
Total Delay	8.4			24.6	0.2		

13796.00 :: Suffolk Downs Redevelopment  
 11: Route 1A on-ramp & Route 145



2017 Existing Conditions  
 Evening Peak Hou

	→	↘	↶	↙	←	↖	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
LOS	A			C	A		
Approach Delay	8.4				4.6		
Approach LOS	A				A		
Queue Length 50th (ft)	65			65	0		
Queue Length 95th (ft)	98			#158	0		
Internal Link Dist (ft)	492				1777	265	
Turn Bay Length (ft)				130			
Base Capacity (vph)	2277			469	4776		
Starvation Cap Reductn	0			0	0		
Spillback Cap Reductn	0			0	0		
Storage Cap Reductn	0			0	0		
Reduced v/c Ratio	0.60			0.69	0.30		

Intersection Summary








Area Type: Other  
 Cycle Length: 41  
 Actuated Cycle Length: 40.6  
 Natural Cycle: 40  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.71  
 Intersection Signal Delay: 6.2  
 Intersection LOS: A  
 Intersection Capacity Utilization 51.1%  
 ICU Level of Service A  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 11: Route 1A on-ramp & Route 145

 Ø1	 Ø2
17 s	24 s

13796.00 :: Suffolk Downs Redevelopment  
11: Route 1A on-ramp & Route 145

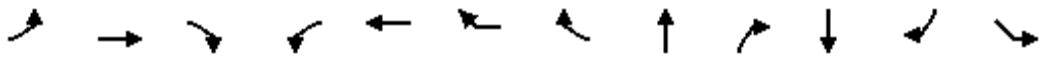
2017 Existing Conditions  
Evening Peak Hou

							
Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↓	↑↑↑		
Traffic Volume (vph)	1045	235	30	280	1385	0	0
Future Volume (vph)	1045	235	30	280	1385	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	9	11	12	12
Total Lost time (s)	5.0			5.0	5.0		
Lane Util. Factor	0.91			1.00	0.91		
Frpb, ped/bikes	0.99			1.00	1.00		
Flpb, ped/bikes	1.00			1.00	1.00		
Frt	0.97			1.00	1.00		
Flt Protected	1.00			0.95	1.00		
Satd. Flow (prot)	4685			1590	4855		
Flt Permitted	1.00			0.95	1.00		
Satd. Flow (perm)	4685			1590	4855		
Peak-hour factor, PHF	0.94	0.94	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1112	250	31	292	1443	0	0
RTOR Reduction (vph)	87	0	0	0	0	0	0
Lane Group Flow (vph)	1275	0	0	323	1443	0	0
Confl. Peds. (#/hr)		7	2	7			
Heavy Vehicles (%)	3%	6%	4%	2%	3%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	2	0	0
Turn Type	NA		Prot	Prot	NA		
Protected Phases	2		1	1	1 2		
Permitted Phases							
Actuated Green, G (s)	19.0			11.6	40.6		
Effective Green, g (s)	19.0			11.6	40.6		
Actuated g/C Ratio	0.47			0.29	1.00		
Clearance Time (s)	5.0			5.0			
Vehicle Extension (s)	2.0			2.0			
Lane Grp Cap (vph)	2192			454	4855		
v/s Ratio Prot	c0.27			c0.20	0.30		
v/s Ratio Perm							
v/c Ratio	0.58			0.71	0.30		
Uniform Delay, d1	7.9			13.0	0.0		
Progression Factor	1.00			1.00	1.00		
Incremental Delay, d2	0.3			4.4	0.0		
Delay (s)	8.1			17.4	0.0		
Level of Service	A			B	A		
Approach Delay (s)	8.1				3.2	0.0	
Approach LOS	A				A	A	
<b>Intersection Summary</b>							
HCM 2000 Control Delay			5.3		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.63				
Actuated Cycle Length (s)			40.6		Sum of lost time (s)		10.0
Intersection Capacity Utilization			51.1%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

13796.00 :: Suffolk Downs Redevelopment  
 31: Route 16 & Winthrop Avenue/Route 145 & Harris Street

2017 Existing Conditions

Evening Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SEL
Lane Configurations												
Traffic Volume (vph)	25	265	25	895	340	65	85	440	820	415	5	195
Future Volume (vph)	25	265	25	895	340	65	85	440	820	415	5	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	16	12	12	12	12	12	14	16	12	12
Grade (%)		0%			0%			0%		0%		0%
Storage Length (ft)	50		0	0		0			0		0	0
Storage Lanes	1		1	2		0			1		0	1
Taper Length (ft)	25			25								25
Satd. Flow (prot)	0	3266	1746	3400	1742	0	0	3471	1656	3889	0	1744
Flt Permitted		0.996		0.950								0.957
Satd. Flow (perm)	0	3265	1746	3363	1742	0	0	3471	1656	3889	0	1744
Right Turn on Red			Yes				No		Yes			
Satd. Flow (RTOR)			126						80			
Link Speed (mph)		30			30			30		30		30
Link Distance (ft)		485			572			480		673		302
Travel Time (s)		11.0			13.0			10.9		15.3		6.9
Confl. Peds. (#/hr)	4		5	5			4				3	
Confl. Bikes (#/hr)						1	1					
Peak Hour Factor	0.95	0.95	0.95	0.89	0.89	0.89	0.89	0.89	0.89	0.73	0.73	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	4%	3%	4%	3%	1%	4%	4%	5%	0%	3%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%		0%		0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	305	26	1006	551	0	0	494	921	575	0	239
Turn Type	Split	NA	Prot	Split	NA			NA	custom	NA		Prot
Protected Phases	4	4	4	3	3			6	2 3	2		7
Permitted Phases												
Detector Phase	4	4	4	3	3			6	2 3	2		7
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0			8.0		8.0		8.0
Minimum Split (s)	20.0	20.0	20.0	28.0	28.0			15.0		20.0		20.0
Total Split (s)	22.0	22.0	22.0	42.0	42.0			57.0		57.0		21.5
Total Split (%)	15.4%	15.4%	15.4%	29.5%	29.5%			40.0%		40.0%		15.1%
Yellow Time (s)	4.0	4.0	4.0	3.0	3.0			4.0		4.0		3.5
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0			3.0		3.0		3.0
Lost Time Adjust (s)		-1.0	-1.0	-1.0	-1.0			-1.0		-1.0		-1.0
Total Lost Time (s)		6.0	6.0	5.0	5.0			6.0		6.0		5.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead							
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None			Min		Min		None
Act Effect Green (s)		15.7	15.7	37.0	37.0			49.4	91.5	49.4		16.0
Actuated g/C Ratio		0.11	0.11	0.26	0.26			0.35	0.65	0.35		0.11
v/c Ratio		0.84	0.08	1.13	1.20			0.41	0.83	0.42		1.21
Control Delay		81.4	0.6	117.7	154.7			35.7	25.4	35.8		182.9
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0	0.0		0.0
Total Delay		81.4	0.6	117.7	154.7			35.7	25.4	35.8		182.9















Lane Group	SER
Lane Configurations	
Traffic Volume (vph)	20
Future Volume (vph)	20
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	5
Confl. Bikes (#/hr)	
Peak Hour Factor	0.90
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	1
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effect Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

13796.00 :: Suffolk Downs Redevelopment  
 31: Route 16 & Winthrop Avenue/Route 145 & Harris Street

2017 Existing Conditions

Evening Peak Hou

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SEL
LOS		F	A	F	F			D	C	D		F
Approach Delay		75.1			130.8			29.0		35.8		182.9
Approach LOS		E			F			C		D		F
Queue Length 50th (ft)		148	0	~559	~625			180	566	211		~272
Queue Length 95th (ft)		#223	0	#681	#841			227	778	206		#447
Internal Link Dist (ft)		405			492			400		593		222
Turn Bay Length (ft)												
Base Capacity (vph)		371	309	894	458			1258	1104	1409		198
Starvation Cap Reductn		0	0	0	0			0	0	0		0
Spillback Cap Reductn		0	0	0	0			0	0	0		0
Storage Cap Reductn		0	0	0	0			0	0	0		0
Reduced v/c Ratio		0.82	0.08	1.13	1.20			0.39	0.83	0.41		1.21

Intersection Summary

Area Type: Other

Cycle Length: 142.5

Actuated Cycle Length: 140.7

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay: 81.1

Intersection LOS: F

Intersection Capacity Utilization 78.6%

ICU Level of Service D

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.





















Queue shown is maximum after two cycles.

Splits and Phases: 31: Route 16 & Winthrop Avenue/Route 145 & Harris Street

			
Ø2	Ø3	Ø4	Ø7
57 s	42 s	22 s	21.5 s
			
Ø6			
57 s			



Lane Group	SER
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SEL
Lane Configurations												
Traffic Volume (vph)	25	265	25	895	340	65	85	440	820	415	5	195
Future Volume (vph)	25	265	25	895	340	65	85	440	820	415	5	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	16	12	12	12	12	12	14	16	12	12
Total Lost time (s)		6.0	6.0	5.0	5.0			6.0	6.0	6.0		5.5
Lane Util. Factor		0.95	1.00	0.97	1.00			0.95	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	1.00	0.99			1.00	1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00
Frt		1.00	0.85	1.00	0.95			1.00	0.85	1.00		0.99
Flt Protected		1.00	1.00	0.95	1.00			1.00	1.00	1.00		0.96
Satd. Flow (prot)		3265	1746	3400	1743			3471	1656	3890		1743
Flt Permitted		1.00	1.00	0.95	1.00			1.00	1.00	1.00		0.96
Satd. Flow (perm)		3265	1746	3400	1743			3471	1656	3890		1743
Peak-hour factor, PHF	0.95	0.95	0.95	0.89	0.89	0.89	0.89	0.89	0.89	0.73	0.73	0.90
Adj. Flow (vph)	26	279	26	1006	382	73	96	494	921	568	7	217
RTOR Reduction (vph)	0	0	23	0	0	0	0	0	27	0	0	0
Lane Group Flow (vph)	0	305	3	1006	551	0	0	494	894	575	0	239
Confl. Peds. (#/hr)	4		5	5			4				3	
Confl. Bikes (#/hr)						1	1					
Heavy Vehicles (%)	0%	3%	4%	3%	4%	3%	1%	4%	4%	5%	0%	3%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Turn Type	Split	NA	Prot	Split	NA			NA	custom	NA		Prot
Protected Phases	4	4	4	3	3			6	2 3	2		7
Permitted Phases												
Actuated Green, G (s)		14.7	14.7	36.0	36.0			48.5	91.5	48.5		15.0
Effective Green, g (s)		15.7	15.7	37.0	37.0			49.5	92.5	49.5		16.0
Actuated g/C Ratio		0.11	0.11	0.26	0.26			0.35	0.66	0.35		0.11
Clearance Time (s)		7.0	7.0	6.0	6.0			7.0		7.0		6.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0		3.0		3.0
Lane Grp Cap (vph)		364	194	894	458			1221	1088	1368		198
v/s Ratio Prot		c0.09	0.00	0.30	c0.32			0.14	c0.54	0.15		c0.14
v/s Ratio Perm												
v/c Ratio		0.84	0.01	1.13	1.20			0.40	0.82	0.42		1.21
Uniform Delay, d1		61.3	55.6	51.8	51.8			34.5	17.9	34.7		62.3
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		15.4	0.0	70.8	110.6			0.2	5.1	0.2		130.9
Delay (s)		76.6	55.6	122.6	162.5			34.7	23.0	34.9		193.3
Level of Service		E	E	F	F			C	C	C		F
Approach Delay (s)		75.0			136.7			27.1		34.9		193.3
Approach LOS		E			F			C		C		F
<b>Intersection Summary</b>												
HCM 2000 Control Delay			83.1			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.02									
Actuated Cycle Length (s)			140.7			Sum of lost time (s)				22.5		
Intersection Capacity Utilization			78.6%			ICU Level of Service				D		
Analysis Period (min)			15									



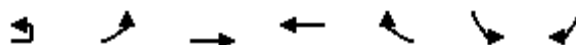


Movement	SER
Lane Configurations	
Traffic Volume (vph)	20
Future Volume (vph)	20
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.90
Adj. Flow (vph)	22
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	5
Confl. Bikes (#/hr)	
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	1
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

c Critical Lane Group

13796.00 :: Suffolk Downs Redevelopment  
38: Route 145/Winthrop Ave & N Shore Rd

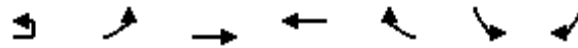
2017 Existing Conditions  
Evening Peak Hou



Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR	Ø3	Ø5
Lane Configurations									
Traffic Volume (vph)	5	275	900	1105	85	125	275		
Future Volume (vph)	5	275	900	1105	85	125	275		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	11	11	11	12	15	12		
Grade (%)			0%	0%		0%			
Storage Length (ft)		120			0	0	150		
Storage Lanes		1			0	1	1		
Taper Length (ft)		25				25			
Satd. Flow (prot)	0	1685	4855	4804	0	1947	1583		
Flt Permitted		0.950				0.950			
Satd. Flow (perm)	0	1685	4855	4804	0	1947	1583		
Right Turn on Red					Yes		Yes		
Satd. Flow (RTOR)				10			340		
Link Speed (mph)			30	30		30			
Link Distance (ft)			1857	236		865			
Travel Time (s)			42.2	5.4		19.7			
Confl. Peds. (#/hr)									
Confl. Bikes (#/hr)					1				
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.81	0.81		
Growth Factor	100%	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	33%	3%	3%	3%	4%	2%	2%		
Bus Blockages (#/hr)	0	0	2	0	0	0	0		
Parking (#/hr)									
Mid-Block Traffic (%)			0%	0%		0%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	315	1011	1384	0	154	340		
Turn Type	Prot	Prot	NA	NA		Prot	Prot		
Protected Phases	4	4	2	2 3		1	1	3	5
Permitted Phases									
Detector Phase	4	4	2	2 3		1	1		
Switch Phase									
Minimum Initial (s)	8.0	8.0	20.0			8.0	8.0	8.0	1.0
Minimum Split (s)	13.0	13.0	26.0			13.0	13.0	13.0	20.0
Total Split (s)	36.0	36.0	36.0			30.0	30.0	40.0	20.0
Total Split (%)	22.2%	22.2%	22.2%			18.5%	18.5%	25%	12%
Yellow Time (s)	4.0	4.0	4.0			4.0	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	2.0			1.0	1.0	1.0	1.0
Lost Time Adjust (s)		-1.0	-2.0			-1.0	-1.0		
Total Lost Time (s)		4.0	4.0			4.0	4.0		
Lead/Lag	Lag	Lag	Lag			Lead	Lead	Lead	
Lead-Lag Optimize?									
Recall Mode	None	None	Min			None	None	None	None
Act Effect Green (s)		31.1	32.6	60.4		26.5	26.5		
Actuated g/C Ratio		0.23	0.24	0.44		0.19	0.19		
v/c Ratio		0.83	0.88	0.65		0.41	0.59		
Control Delay		70.7	60.7	4.7		56.4	10.0		
Queue Delay		0.0	1.1	0.7		0.2	0.0		
Total Delay		70.7	61.8	5.4		56.6	10.0		

13796.00 :: Suffolk Downs Redevelopment  
 38: Route 145/Winthrop Ave & N Shore Rd

2017 Existing Conditions  
 Evening Peak Hou



Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR	Ø3	Ø5
LOS		E	E	A		E	B		
Approach Delay			63.9	5.4		24.5			
Approach LOS			E	A		C			
Queue Length 50th (ft)		242	291	34		111	0		
Queue Length 95th (ft)		#519	#515	m87		205	48		
Internal Link Dist (ft)			1777	156		785			
Turn Bay Length (ft)		120					150		
Base Capacity (vph)		400	1155	2576		376	580		
Starvation Cap Reductn		0	0	776		0	0		
Spillback Cap Reductn		0	38	0		19	0		
Storage Cap Reductn		0	0	0		0	0		
Reduced v/c Ratio		0.79	0.91	0.77		0.43	0.59		

Intersection Summary

Area Type: Other

Cycle Length: 162

Actuated Cycle Length: 137.1

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.13

Intersection Signal Delay: 32.6

Intersection LOS: C

Intersection Capacity Utilization 65.8%

ICU Level of Service C

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

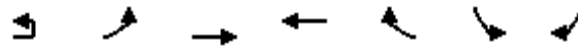
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 38: Route 145/Winthrop Ave & N Shore Rd













#38 #39 	#38 #39 	#38 #39 	#38 #39 	#38 #39 
30 s	36 s	40 s	36 s	20 s

13796.00 :: Suffolk Downs Redevelopment  
38: Route 145/Winthrop Ave & N Shore Rd

2017 Existing Conditions  
Evening Peak Hou















Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↩	↑↑↑	↑↑↑		↩	↩
Traffic Volume (vph)	5	275	900	1105	85	125	275
Future Volume (vph)	5	275	900	1105	85	125	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	11	12	15	12
Total Lost time (s)		4.0	4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	0.91	0.91		1.00	1.00
Frpb, ped/bikes		1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00
Frt		1.00	1.00	0.99		1.00	0.85
Flt Protected		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)		1685	4855	4805		1947	1583
Flt Permitted		0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)		1685	4855	4805		1947	1583
Peak-hour factor, PHF	0.89	0.89	0.89	0.86	0.86	0.81	0.81
Adj. Flow (vph)	6	309	1011	1285	99	154	340
RTOR Reduction (vph)	0	0	0	6	0	0	275
Lane Group Flow (vph)	0	315	1011	1378	0	154	65
Confl. Bikes (#/hr)					1		
Heavy Vehicles (%)	33%	3%	3%	3%	4%	2%	2%
Bus Blockages (#/hr)	0	0	2	0	0	0	0
Turn Type	Prot	Prot	NA	NA		Prot	Prot
Protected Phases	4	4	2	2 3		1	1
Permitted Phases							
Actuated Green, G (s)		30.1	30.6	59.3		25.5	25.5
Effective Green, g (s)		31.1	32.6	61.3		26.5	26.5
Actuated g/C Ratio		0.22	0.23	0.44		0.19	0.19
Clearance Time (s)		5.0	6.0			5.0	5.0
Vehicle Extension (s)		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)		375	1135	2112		370	300
v/s Ratio Prot		c0.19	c0.21	c0.29		c0.08	0.04
v/s Ratio Perm							
v/c Ratio		0.84	0.89	0.65		0.42	0.22
Uniform Delay, d1		51.8	51.7	30.7		49.6	47.7
Progression Factor		1.00	1.00	0.15		1.00	1.00
Incremental Delay, d2		15.8	9.2	0.1		0.8	0.4
Delay (s)		67.5	60.9	4.6		50.4	48.0
Level of Service		E	E	A		D	D
Approach Delay (s)			62.5	4.6		48.8	
Approach LOS			E	A		D	
<b>Intersection Summary</b>							
HCM 2000 Control Delay			35.4		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio			0.70				
Actuated Cycle Length (s)			139.4		Sum of lost time (s)		20.0
Intersection Capacity Utilization			65.8%		ICU Level of Service		C
Analysis Period (min)			15				
c Critical Lane Group							

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↗		↘	↑↑↑		↖		↗		
Traffic Volume (vph)	0	895	130	5	190	1145	0	45	0	40	0	0
Future Volume (vph)	0	895	130	5	190	1145	0	45	0	40	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	11	12	9	11	12	10	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	0		0		100		0	0		100	0	
Storage Lanes	0		1		1		0	1		1	0	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	0	3388	1501	0	1593	4903	0	2944	0	1615	0	0
Flt Permitted					0.950			0.950				
Satd. Flow (perm)	0	3388	1501	0	1593	4903	0	2944	0	1615	0	0
Right Turn on Red			No				Yes			No		
Satd. Flow (RTOR)												
Link Speed (mph)		30				30			30			30
Link Distance (ft)		236				635			5227			589
Travel Time (s)		5.4				14.4			118.8			13.4
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.90	0.90	0.90	0.87	0.87	0.87	0.87	0.81	0.81	0.81	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	4%	0%	2%	2%	0%	11%	0%	0%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	994	144	0	224	1316	0	56	0	49	0	0
Turn Type		NA	Perm	Prot	Prot	NA		Prot		Prot		
Protected Phases		1 2		4	4	2		3		3		
Permitted Phases			1 2									
Detector Phase		1 2	1 2	4	4	2		3		3		
Switch Phase												
Minimum Initial (s)				8.0	8.0	20.0		8.0		8.0		
Minimum Split (s)				13.0	13.0	26.0		13.0		13.0		
Total Split (s)				36.0	36.0	36.0		40.0		40.0		
Total Split (%)				22.2%	22.2%	22.2%		24.7%		24.7%		
Yellow Time (s)				4.0	4.0	4.0		4.0		4.0		
All-Red Time (s)				1.0	1.0	2.0		1.0		1.0		
Lost Time Adjust (s)					-1.0	-2.0		-1.0		-1.0		
Total Lost Time (s)					4.0	4.0		4.0		4.0		
Lead/Lag				Lag	Lag	Lag		Lead		Lead		
Lead-Lag Optimize?												
Recall Mode				None	None	Min		None		None		
Act Effect Green (s)		64.2	62.2		31.1	32.6		23.7		23.7		
Actuated g/C Ratio		0.47	0.45		0.23	0.24		0.17		0.17		
v/c Ratio		0.63	0.21		0.62	1.13		0.11		0.18		
Control Delay		23.3	10.9		59.5	115.7		49.5		51.4		
Queue Delay		1.5	1.2		0.0	0.1		0.0		0.0		
Total Delay		24.8	12.1		59.5	115.9		49.5		51.4		

13796.00 :: Suffolk Downs Redevelopment  
 39: Tomasello Dr/Shaws Driveway & Winthrop Ave/Route 145

2017 Existing Conditions  
 Evening Peak Hou

Lane Group	SBR	Ø1	Ø5
Lane Configurations	↗		
Traffic Volume (vph)	0		
Future Volume (vph)	0		
Ideal Flow (vphpl)	1900		
Lane Width (ft)	16		
Grade (%)			
Storage Length (ft)	0		
Storage Lanes	1		
Taper Length (ft)			
Satd. Flow (prot)	2111		
Flt Permitted			
Satd. Flow (perm)	2111		
Right Turn on Red	No		
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Peak Hour Factor	0.92		
Growth Factor	100%		
Heavy Vehicles (%)	2%		
Bus Blockages (#/hr)	0		
Parking (#/hr)			
Mid-Block Traffic (%)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0		
Turn Type	Perm		
Protected Phases		1	5
Permitted Phases	3		
Detector Phase	3		
Switch Phase			
Minimum Initial (s)	8.0	8.0	1.0
Minimum Split (s)	13.0	13.0	20.0
Total Split (s)	40.0	30.0	20.0
Total Split (%)	24.7%	19%	12%
Yellow Time (s)	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		
Total Lost Time (s)	4.0		
Lead/Lag	Lead	Lead	
Lead-Lag Optimize?			
Recall Mode	None	None	None
Act Effect Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
LOS		C	B		E	F		D		D		
Approach Delay		23.2				107.7			50.4			
Approach LOS		C				F			D			
Queue Length 50th (ft)		68	6		163	~443		20		35		
Queue Length 95th (ft)		284	m32		313	#727		40		73		
Internal Link Dist (ft)		156				555			5147			509
Turn Bay Length (ft)					100					100		
Base Capacity (vph)		1586	680		378	1166		787		432		
Starvation Cap Reductn		380	362		0	0		0		0		
Spillback Cap Reductn		0	0		0	39		56		0		
Storage Cap Reductn		0	0		0	0		0		0		
Reduced v/c Ratio		0.82	0.45		0.59	1.17		0.08		0.11		

**Intersection Summary**

Area Type: Other

Cycle Length: 162

Actuated Cycle Length: 137.1

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.13

Intersection Signal Delay: 71.0

Intersection LOS: E

Intersection Capacity Utilization 52.2%

ICU Level of Service A

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.















Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

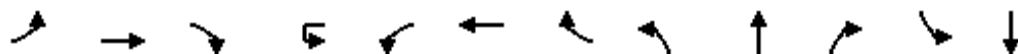
Splits and Phases: 39: Tomasello Dr/Shaws Driveway &amp; Winthrop Ave/Route 145

#38 #39   	#38 #39   	#38 #39   	#38 #39   	 
30 s	36 s	40 s	36 s	20 s





Lane Group	SBR	Ø1	Ø5
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			
Intersection Summary			



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑		↓	↑↑↑		↑↑		↑		
Traffic Volume (vph)	0	895	130	5	190	1145	0	45	0	40	0	0
Future Volume (vph)	0	895	130	5	190	1145	0	45	0	40	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	12	9	11	12	10	12	12	12	12
Total Lost time (s)		3.0	5.0		4.0	4.0		4.0		4.0		
Lane Util. Factor		0.95	1.00		1.00	0.91		0.97		1.00		
Frpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00		
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00		
Frt		1.00	0.85		1.00	1.00		1.00		0.85		
Flt Protected		1.00	1.00		0.95	1.00		0.95		1.00		
Satd. Flow (prot)		3388	1501		1593	4903		2944		1615		
Flt Permitted		1.00	1.00		0.95	1.00		0.95		1.00		
Satd. Flow (perm)		3388	1501		1593	4903		2944		1615		
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.87	0.81	0.81	0.81	0.92	0.92
Adj. Flow (vph)	0	994	144	6	218	1316	0	56	0	49	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	994	144	0	224	1316	0	56	0	49	0	0
Confl. Bikes (#/hr)							1					
Heavy Vehicles (%)	0%	3%	4%	0%	2%	2%	0%	11%	0%	0%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0
Turn Type		NA	Perm	Prot	Prot	NA		Prot		Prot		
Protected Phases		1 2		4	4	2		3		3		
Permitted Phases			1 2									
Actuated Green, G (s)		61.1	61.1		30.1	30.6		22.7		22.7		
Effective Green, g (s)		63.1	61.1		31.1	32.6		23.7		23.7		
Actuated g/C Ratio		0.45	0.44		0.22	0.23		0.17		0.17		
Clearance Time (s)					5.0	6.0		5.0		5.0		
Vehicle Extension (s)					4.0	4.0		4.0		4.0		
Lane Grp Cap (vph)		1533	657		355	1146		500		274		
v/s Ratio Prot		c0.29			c0.14	c0.27		0.02		c0.03		
v/s Ratio Perm			0.10									
v/c Ratio		0.65	0.22		0.63	1.15		0.11		0.18		
Uniform Delay, d1		29.6	24.3		49.0	53.4		48.9		49.5		
Progression Factor		0.72	0.39		1.00	1.00		1.00		1.00		
Incremental Delay, d2		0.5	0.1		4.1	77.3		0.1		0.4		
Delay (s)		21.8	9.5		53.0	130.7		49.1		49.9		
Level of Service		C	A		D	F		D		D		
Approach Delay (s)		20.3				119.4			49.5			0.0
Approach LOS		C				F			D			A

**Intersection Summary**

HCM 2000 Control Delay	76.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	139.4	Sum of lost time (s)	20.0
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		



















c Critical Lane Group

13796.00 :: Suffolk Downs Redevelopment  
 39: Tomasello Dr/Shaws Driveway & Winthrop Ave/Route 145













2017 Existing Conditions  
 Evening Peak Hou



Movement	SBR
Lane Configurations	7
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Lane Width	16
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Bikes (#/hr)	
Heavy Vehicles (%)	2%
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	3
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	95	360	0	0	0	340	175	35	15	680	175
Future Volume (vph)	40	95	360	0	0	0	340	175	35	15	680	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	12	12	12	10	11	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1562	1319	0	0	0	1472	1583	0	0	1690	1253
Flt Permitted		0.985					0.110				0.991	
Satd. Flow (perm)	0	1562	1319	0	0	0	170	1583	0	0	1676	1253
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			316					11				133
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		988			531			233			338	
Travel Time (s)		22.5			12.1			5.3			7.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.85	0.85	0.85	0.92	0.92	0.92	0.84	0.84	0.84	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	9%	2%	2%	2%	2%	3%	1%	6%	6%	1%	3%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	2
Parking (#/hr)									1			1
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	159	424	0	0	0	405	250	0	0	763	192
Turn Type	Split	NA	Prot				D.P+P	NA		Perm	NA	Perm
Protected Phases	4	4	4				2	2 6			6	
Permitted Phases							6			6		6
Detector Phase	4	4	4				2	2 6		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0				5.0			5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0				12.0			10.0	10.0	10.0
Total Split (s)	36.0	36.0	36.0				21.0			40.0	40.0	40.0
Total Split (%)	29.3%	29.3%	29.3%				17.1%			32.5%	32.5%	32.5%
Yellow Time (s)	4.0	4.0	4.0				5.0			4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0				2.0			1.0	1.0	1.0
Lost Time Adjust (s)		-2.0	-2.0				-1.0				-2.0	0.0
Total Lost Time (s)		4.0	4.0				6.0				3.0	5.0
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None				Min			Max	Max	Max
Act Effect Green (s)		20.8	20.8				49.2	55.2			37.2	35.1
Actuated g/C Ratio		0.19	0.19				0.44	0.49			0.33	0.31
v/c Ratio		0.55	0.84				1.63	0.32			1.38	0.40
Control Delay		48.1	27.7				325.7	19.1			212.1	13.9
Queue Delay		0.0	0.0				0.0	0.0			0.0	0.0
Total Delay		48.1	27.7				325.7	19.1			212.1	13.9

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	26.0
Total Split (s)	26.0
Total Split (%)	21%
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effect Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D	C				F	B			F	B
Approach Delay		33.3						208.7			172.3	
Approach LOS		C						F			F	
Queue Length 50th (ft)		105	75				~374	96			~709	30
Queue Length 95th (ft)		159	172				#592	172			#1085	104
Internal Link Dist (ft)		908			451			153			258	
Turn Bay Length (ft)			50									
Base Capacity (vph)		447	603				249	784			554	483
Starvation Cap Reductn		0	0				0	0			0	0
Spillback Cap Reductn		0	0				0	0			0	0
Storage Cap Reductn		0	0				0	0			0	0
Reduced v/c Ratio		0.36	0.70				1.63	0.32			1.38	0.40

**Intersection Summary**

Area Type: CBD

Cycle Length: 123

Actuated Cycle Length: 112.2

Natural Cycle: 150

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.63

Intersection Signal Delay: 146.2

Intersection LOS: F

Intersection Capacity Utilization 81.3%

ICU Level of Service D

Analysis Period (min) 15



















~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 46: Bennington Street/State Road &amp; Winthrop Avenue /Winthrop Avenue

																	
Ø2	Ø6	Ø4	Ø3														
21 s	40 s	36 s	26 s														

Lane Group	Ø3
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱				↰	↱			↰	↱
Traffic Volume (vph)	40	95	360	0	0	0	340	175	35	15	680	175
Future Volume (vph)	40	95	360	0	0	0	340	175	35	15	680	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	10	12	12	12	10	11	12	12	12	12
Total Lost time (s)		4.0	4.0				6.0	6.0			3.0	5.0
Lane Util. Factor		1.00	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.85				1.00	0.97			1.00	0.85
Flt Protected		0.99	1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)		1563	1319				1472	1582			1690	1253
Flt Permitted		0.99	1.00				0.11	1.00			0.99	1.00
Satd. Flow (perm)		1563	1319				171	1582			1677	1253
Peak-hour factor, PHF	0.85	0.85	0.85	0.92	0.92	0.92	0.84	0.84	0.84	0.91	0.91	0.91
Adj. Flow (vph)	47	112	424	0	0	0	405	208	42	16	747	192
RTOR Reduction (vph)	0	0	257	0	0	0	0	5	0	0	0	91
Lane Group Flow (vph)	0	159	167	0	0	0	405	245	0	0	763	101
Heavy Vehicles (%)	5%	9%	2%	2%	2%	2%	3%	1%	6%	6%	1%	3%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	2
Parking (#/hr)									1			1
Turn Type	Split	NA	Prot				D.P+P	NA		Perm	NA	Perm
Protected Phases	4	4	4				2	2 6			6	
Permitted Phases							6			6		6
Actuated Green, G (s)		18.8	18.8				49.3	56.3			35.2	35.2
Effective Green, g (s)		20.8	20.8				51.3	57.3			37.2	35.2
Actuated g/C Ratio		0.19	0.19				0.46	0.51			0.33	0.31
Clearance Time (s)		6.0	6.0				7.0				5.0	5.0
Vehicle Extension (s)		3.0	3.0				3.0				3.0	3.0
Lane Grp Cap (vph)		289	244				253	807			556	393
v/s Ratio Prot		0.10	c0.13				c0.22	0.15				
v/s Ratio Perm							c0.52				0.46	0.08
v/c Ratio		0.55	0.68				1.60	0.30			1.37	0.26
Uniform Delay, d1		41.5	42.6				33.2	15.9			37.5	28.7
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		2.3	7.7				288.1	0.2			178.7	1.6
Delay (s)		43.7	50.3				321.3	16.1			216.2	30.3
Level of Service		D	D				F	B			F	C
Approach Delay (s)		48.5			0.0			204.8			178.8	
Approach LOS		D			A			F			F	

**Intersection Summary**

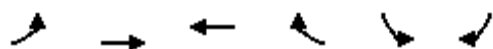
HCM 2000 Control Delay	151.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	112.2	Sum of lost time (s)	19.0
Intersection Capacity Utilization	81.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



13796.00 :: Suffolk Downs Redevelopment  
 106: Route 145/Winthrop Avenue & Revere Beach Pkwy

2017 Existing Conditions  
 Morning Peak Hou



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	←←	↑	↑↑			↑↑↑
Traffic Volume (vph)	345	595	465	5	0	875
Future Volume (vph)	345	595	465	5	0	875
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	2			0	0	3
Taper Length (ft)	25				25	
Satd. Flow (prot)	3400	1845	3535	0	0	3610
Flt Permitted	0.950					
Satd. Flow (perm)	3391	1845	3535	0	0	3610
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1			512
Link Speed (mph)		30	30		30	
Link Distance (ft)		635	988		1471	
Travel Time (s)		14.4	22.5		33.4	
Confl. Peds. (#/hr)	8			8	4	
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	375	647	510	0	0	951
Turn Type	Split	NA	NA			Over
Protected Phases	1	1	2			1
Permitted Phases						
Detector Phase	1	1	2			1
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0			10.0
Minimum Split (s)	15.0	15.0	14.5			15.0
Total Split (s)	55.0	55.0	49.5			55.0
Total Split (%)	52.6%	52.6%	47.4%			52.6%
Yellow Time (s)	4.0	4.0	3.5			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.0	4.5			5.0
Lead/Lag	Lead	Lead	Lag			Lead
Lead-Lag Optimize?						
Recall Mode	Min	Min	None			Min
Act Effect Green (s)	50.1	50.1	17.7			50.1
Actuated g/C Ratio	0.65	0.65	0.23			0.65
v/c Ratio	0.17	0.54	0.63			0.38
Control Delay	6.1	10.1	30.4			3.4
Queue Delay	0.0	0.2	0.0			0.0
Total Delay	6.1	10.3	30.4			3.4

13796.00 :: Suffolk Downs Redevelopment  
 106: Route 145/Winthrop Avenue & Revere Beach Pkwy

2017 Existing Conditions  
 Morning Peak Hou



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS	A	B	C			A
Approach Delay		8.8	30.4		3.4	
Approach LOS		A	C		A	
Queue Length 50th (ft)	32	148	116			32
Queue Length 95th (ft)	59	280	164			64
Internal Link Dist (ft)		555	908		1391	
Turn Bay Length (ft)						
Base Capacity (vph)	2204	1196	2062			2520
Starvation Cap Reductn	0	101	0			0
Spillback Cap Reductn	0	0	0			0
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	0.17	0.59	0.25			0.38

Intersection Summary

Area Type: Other  
 Cycle Length: 104.5  
 Actuated Cycle Length: 77.3  
 Natural Cycle: 40  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.63  
 Intersection Signal Delay: 11.2  
 Intersection LOS: B  
 Intersection Capacity Utilization 41.3%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 106: Route 145/Winthrop Avenue & Revere Beach Pkwy

 Ø1	 Ø2
55 s	49.5 s



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	345	595	465	5	0	875
Future Volume (vph)	345	595	465	5	0	875
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.5			5.0
Lane Util. Factor	0.97	1.00	0.95			0.76
Frpb, ped/bikes	1.00	1.00	1.00			1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00
Frt	1.00	1.00	1.00			0.85
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3400	1845	3533			3610
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3400	1845	3533			3610
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	375	647	505	5	0	951
RTOR Reduction (vph)	0	0	1	0	0	180
Lane Group Flow (vph)	375	647	509	0	0	771
Confl. Peds. (#/hr)	8			8	4	
Confl. Bikes (#/hr)						1
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	Split	NA	NA			Over
Protected Phases	1	1	2			1
Permitted Phases						
Actuated Green, G (s)	50.1	50.1	17.7			50.1
Effective Green, g (s)	50.1	50.1	17.7			50.1
Actuated g/C Ratio	0.65	0.65	0.23			0.65
Clearance Time (s)	5.0	5.0	4.5			5.0
Vehicle Extension (s)	7.0	7.0	4.0			7.0
Lane Grp Cap (vph)	2203	1195	808			2339
v/s Ratio Prot	0.11	c0.35	c0.14			0.21
v/s Ratio Perm						
v/c Ratio	0.17	0.54	0.63			0.33
Uniform Delay, d1	5.4	7.4	26.9			6.1
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	1.4	1.8			0.3
Delay (s)	5.5	8.8	28.7			6.4
Level of Service	A	A	C			A
Approach Delay (s)		7.6	28.7		6.4	
Approach LOS		A	C		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay			11.4		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.56			
Actuated Cycle Length (s)			77.3		Sum of lost time (s)	9.5
Intersection Capacity Utilization			41.3%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø2	Ø3	Ø4
Lane Configurations					↕↕	↗		↕↕			↕↕	↗				
Traffic Volume (vph)	0	0	0	0	990	275	0	620	0	0	830	335				
Future Volume (vph)	0	0	0	0	990	275	0	620	0	0	830	335				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Satd. Flow (prot)	0	0	0	0	3406	1538	0	3282	0	0	3343	1524				
Flt Permitted																
Satd. Flow (perm)	0	0	0	0	3406	1538	0	3282	0	0	3343	1524				
Right Turn on Red			Yes			Yes			Yes			Yes				
Satd. Flow (RTOR)						192						316				
Link Speed (mph)		30			30			30			30					
Link Distance (ft)		244			245			403			338					
Travel Time (s)		5.5			5.6			9.2			7.7					
Confl. Peds. (#/hr)						19										
Confl. Bikes (#/hr)						1										
Peak Hour Factor	0.92	0.92	0.92	0.92	0.94	0.94	0.92	0.89	0.92	0.92	0.92	0.92				
Heavy Vehicles (%)	2%	2%	2%	2%	6%	5%	2%	10%	2%	2%	8%	6%				
Shared Lane Traffic (%)																
Lane Group Flow (vph)	0	0	0	0	1053	293	0	697	0	0	902	364				
Turn Type					NA	Prot		NA			NA	Prot				
Protected Phases					4 5 6 8	4 5 6 8		1 2 3			1 2	1 2	1	2	3	4
Permitted Phases																
Minimum Split (s)													10.0	19.0	16.0	16.0
Total Split (s)													35.0	14.0	16.0	16.0
Total Split (%)													31%	12%	14%	14%
Yellow Time (s)													4.0	4.0	3.0	3.0
All-Red Time (s)													1.0	1.0	1.0	1.0
Lost Time Adjust (s)																
Total Lost Time (s)																
Lead/Lag													Lead	Lag		Lead
Lead-Lag Optimize?																
Act Effct Green (s)					45.0	45.0		60.0			44.0	44.0				
Actuated g/C Ratio					0.39	0.39		0.53			0.39	0.39				
v/c Ratio					0.78	0.41		0.40			0.70	0.47				
Control Delay					40.4	14.0		0.6			33.0	6.5				
Queue Delay					50.2	2.5		0.1			0.0	0.0				
Total Delay					90.7	16.5		0.7			33.0	6.5				
LOS					F	B		A			C	A				
Approach Delay					74.5			0.7			25.4					
Approach LOS					E			A			C					
Queue Length 50th (ft)					386	64		0			288	22				
Queue Length 95th (ft)					477	m96		0			364	92				
Internal Link Dist (ft)		164			165			323			258					
Turn Bay Length (ft)																
Base Capacity (vph)					1344	723		1727			1290	782				
Starvation Cap Reductn					569	308		219			0	0				
Spillback Cap Reductn					0	0		0			0	0				
Storage Cap Reductn					0	0		0			0	0				
Reduced v/c Ratio					1.36	0.71		0.46			0.70	0.47				

#### Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 40.2

Intersection LOS: D

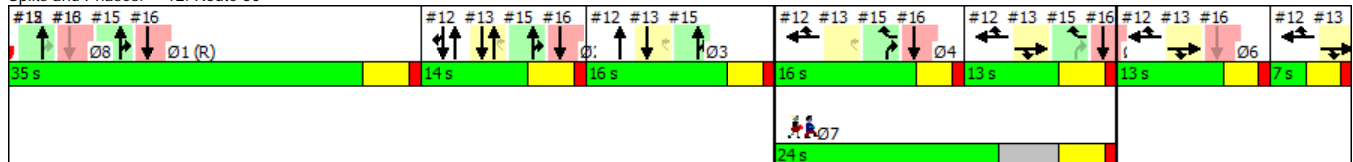
Intersection Capacity Utilization 57.8%

ICU Level of Service B













Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

#### Splits and Phases: 12: Route 60



Lane Group	Ø5	Ø6	Ø7	Ø8
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	5	6	7	8
Permitted Phases				
Minimum Split (s)	13.0	13.0	24.0	9.0
Total Split (s)	13.0	13.0	24.0	7.0
Total Split (%)	11%	11%	21%	6%
Yellow Time (s)	4.0	3.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead		Lag
Lead-Lag Optimize?				
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				
Intersection Summary				

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑↑			↑↑	↑
Traffic Volume (vph)	0	0	0	0	990	275	0	620	0	0	830	335
Future Volume (vph)	0	0	0	0	990	275	0	620	0	0	830	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		5.0			5.0	5.0
Lane Util. Factor					0.95	1.00		0.95			0.95	1.00
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					3406	1538		3282			3343	1524
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					3406	1538		3282			3343	1524
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.94	0.94	0.92	0.89	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1053	293	0	697	0	0	902	364
RTOR Reduction (vph)	0	0	0	0	0	125	0	0	0	0	0	194
Lane Group Flow (vph)	0	0	0	0	1053	168	0	697	0	0	902	170
Confl. Peds. (#/hr)					19							
Confl. Bikes (#/hr)					1							
Heavy Vehicles (%)	2%	2%	2%	2%	6%	5%	2%	10%	2%	2%	8%	6%
Turn Type					NA	Prot		NA			NA	Prot
Protected Phases					4 5 6 8	4 5 6 8		1 2 3			1 2	1 2
Permitted Phases												
Actuated Green, G (s)					45.0	45.0		61.0			44.0	44.0
Effective Green, g (s)					40.0	40.0		61.0			44.0	44.0
Actuated g/C Ratio					0.35	0.35		0.54			0.39	0.39
Clearance Time (s)												
Lane Grp Cap (vph)					1195	539		1756			1290	588
v/s Ratio Prot					c0.31	0.11		c0.21			c0.27	0.11
v/s Ratio Perm												
v/c Ratio					0.88	0.31		0.40			0.70	0.29
Uniform Delay, d1					34.8	27.0		15.6			29.4	24.2
Progression Factor					1.20	1.48		0.00			1.00	1.00
Incremental Delay, d2					7.6	1.2		0.6			3.2	1.2
Delay (s)					49.3	41.1		0.6			32.6	25.4
Level of Service					D	D		A			C	C
Approach Delay (s)		0.0			47.6			0.6			30.5	
Approach LOS		A			D			A			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			31.1		HCM 2000 Level of Service					C		
HCM 2000 Volume to Capacity ratio			0.86									
Actuated Cycle Length (s)			114.0		Sum of lost time (s)					31.0		
Intersection Capacity Utilization			57.8%		ICU Level of Service					B		
Analysis Period (min)			15									

c Critical Lane Group

	→	↘	↑	↗	↓	↖							
Lane Group	EBT	EBR2	NBT	NBR	SBT	NWR2	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations	↑↑	↑↑	↑↑	↑	↑↑	↑↑							
Traffic Volume (vph)	510	875	620	365	830	595							
Future Volume (vph)	510	875	620	365	830	595							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900							
Storage Length (ft)				100									
Storage Lanes				1									
Taper Length (ft)													
Satd. Flow (prot)	3406	2707	3252	1482	3343	2760							
Flt Permitted													
Satd. Flow (perm)	3406	2707	3252	1482	3343	2760							
Right Turn on Red		Yes				Yes							
Satd. Flow (RTOR)		514				178							
Link Speed (mph)	30		30		30								
Link Distance (ft)	272		380		403								
Travel Time (s)	6.2		8.6		9.2								
Peak Hour Factor	0.97	0.97	0.87	0.85	0.89	0.80							
Heavy Vehicles (%)	6%	5%	11%	9%	8%	3%							
Shared Lane Traffic (%)													
Lane Group Flow (vph)	526	902	713	429	933	744							
Turn Type	NA	Prot	NA	custom	NA	Perm							
Protected Phases	5 6 8	5 6 8	1 2	1	1 2 3		2	3	4	5	6	7	8
Permitted Phases						2 3 4							
Minimum Split (s)				10.0			19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)				35.0			14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)				30.7%			12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)				4.0			4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)				1.0			1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)				0.0									
Total Lost Time (s)				5.0									
Lead/Lag				Lead			Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?													
Act Effect Green (s)	28.0	28.0	44.0	30.0	60.0	41.0							
Actuated g/C Ratio	0.25	0.25	0.39	0.26	0.53	0.36							
v/c Ratio	0.63	0.86	0.57	1.10	0.53	0.67							
Control Delay	29.3	15.3	29.7	115.4	1.4	26.5							
Queue Delay	5.9	1.5	0.0	0.0	0.2	0.0							
Total Delay	35.2	16.8	29.7	115.4	1.6	26.5							
LOS	D	B	C	F	A	C							
Approach Delay	23.6		61.9		1.6								
Approach LOS	C		E		A								
Queue Length 50th (ft)	118	7	213	~358	5	198							
Queue Length 95th (ft)	197	#84	263	#507	6	224							
Internal Link Dist (ft)	192		300		323								
Turn Bay Length (ft)				100									
Base Capacity (vph)	836	1052	1255	390	1759	1106							
Starvation Cap Reductn	250	51	0	0	197	0							
Spillback Cap Reductn	0	0	0	0	0	0							
Storage Cap Reductn	0	0	0	0	0	0							
Reduced v/c Ratio	0.90	0.90	0.57	1.10	0.60	0.67							

#### Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 29.6

Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

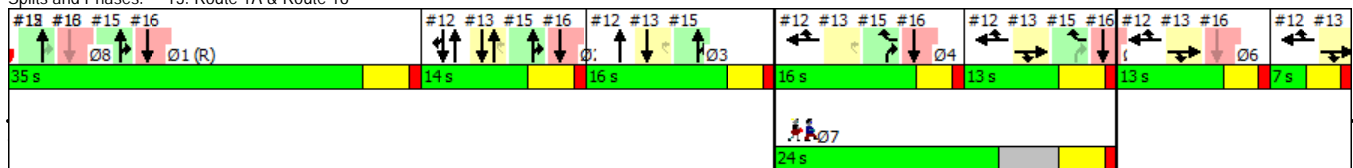
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 13: Route 1A & Route 16



	→	↘	↑	↗	↓	↖
Movement	EBT	EBR2	NBT	NBR	SBT	NWR2
Lane Configurations	↑↑	↑↑	↑↑	↑	↑↑	↑↑
Traffic Volume (vph)	510	875	620	365	830	595
Future Volume (vph)	510	875	620	365	830	595
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.95	0.88	0.95	1.00	0.95	0.88
Frt	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)	3406	2707	3252	1482	3343	2760
Flt Permitted	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (perm)	3406	2707	3252	1482	3343	2760
Peak-hour factor, PHF	0.97	0.97	0.87	0.85	0.89	0.80
Adj. Flow (vph)	526	902	713	429	933	744
RTOR Reduction (vph)	0	401	0	0	0	119
Lane Group Flow (vph)	526	501	713	429	933	625
Heavy Vehicles (%)	6%	5%	11%	9%	8%	3%
Turn Type	NA	Prot	NA	custom	NA	Perm
Protected Phases	5 6 8	5 6 8	1 2	1	1 2 3	
Permitted Phases						2 3 4
Actuated Green, G (s)	29.0	29.0	44.0	30.0	61.0	42.0
Effective Green, g (s)	25.0	25.0	44.0	30.0	61.0	38.0
Actuated g/C Ratio	0.22	0.22	0.39	0.26	0.54	0.33
Clearance Time (s)				5.0		
Lane Grp Cap (vph)	746	593	1255	390	1788	920
v/s Ratio Prot	0.15	c0.18	0.22	c0.29	0.28	
v/s Ratio Perm						c0.23
v/c Ratio	0.71	0.84	0.57	1.10	0.52	0.68
Uniform Delay, d1	41.1	42.6	27.5	42.0	17.1	32.8
Progression Factor	0.67	0.34	1.00	1.00	0.03	1.00
Incremental Delay, d2	5.3	13.2	1.9	75.3	0.8	4.0
Delay (s)	32.7	27.9	29.4	117.3	1.3	36.8
Level of Service	C	C	C	F	A	D
Approach Delay (s)	29.7		62.4		1.3	
Approach LOS	C		E		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay			33.5		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.96			
Actuated Cycle Length (s)			114.0		Sum of lost time (s)	31.0
Intersection Capacity Utilization			Err%		ICU Level of Service	H
Analysis Period (min)			15			

c Critical Lane Group



	↙	↖	↑	↗	↘	↓								
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations		↗↗	↑↑	↗↗										
Traffic Volume (vph)	0	965	350	1120	0	0								
Future Volume (vph)	0	965	350	1120	0	0								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Satd. Flow (prot)	0	2707	3406	2707	0	0								
Flt Permitted														
Satd. Flow (perm)	0	2707	3406	2707	0	0								
Right Turn on Red		Yes		Yes										
Satd. Flow (RTOR)		956		1333										
Link Speed (mph)	30		30			30								
Link Distance (ft)	507		317			245								
Travel Time (s)	11.5		7.2			5.6								
Confl. Peds. (#/hr)		9												
Peak Hour Factor	0.92	0.92	0.87	0.84	0.92	0.92								
Heavy Vehicles (%)	2%	5%	6%	5%	2%	2%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	1049	402	1333	0	0								
Turn Type		custom	NA	custom										
Protected Phases		4 5	1 2 3 8	1 2 3 4			1	2	3	4	5	6	7	8
Permitted Phases				5 8										
Minimum Split (s)							10.0	19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)							35.0	14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)							31%	12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)							4.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)														
Total Lost Time (s)														
Lead/Lag							Lead	Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?														
Act Effect Green (s)		25.0	67.0	96.0										
Actuated g/C Ratio		0.22	0.59	0.84										
v/c Ratio		0.78	0.20	0.54										
Control Delay		9.3	9.7	2.4										
Queue Delay		36.3	0.7	0.6										
Total Delay		45.6	10.5	3.0										
LOS		D	B	A										
Approach Delay	45.6		4.7											
Approach LOS	D		A											
Queue Length 50th (ft)		31	65	0										
Queue Length 95th (ft)		111	m93	m57										
Internal Link Dist (ft)	427		237			165								
Turn Bay Length (ft)														
Base Capacity (vph)		1339	2001	2490										
Starvation Cap Reductn		0	1241	695										
Spillback Cap Reductn		357	773	0										
Storage Cap Reductn		0	0	0										
Reduced v/c Ratio		1.07	0.53	0.74										

#### Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 20.1

Intersection LOS: C

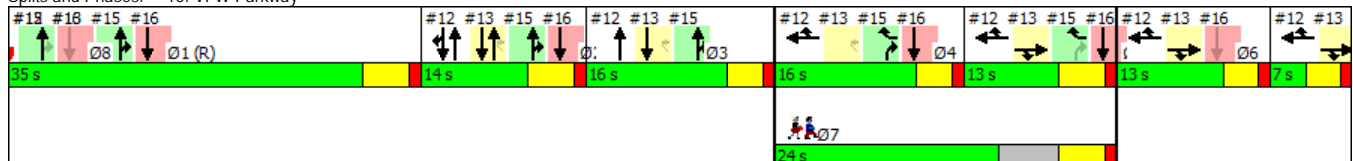
Intersection Capacity Utilization 51.9%










ICU Level of Service A




Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 15: VFW Parkway



						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	965	350	1120	0	0
Future Volume (vph)	0	965	350	1120	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.0	5.0		
Lane Util. Factor		0.88	0.95	0.88		
Flpb, ped/bikes		1.00	1.00	1.00		
Flpb, ped/bikes		1.00	1.00	1.00		
Frt		0.85	1.00	0.85		
Flt Protected		1.00	1.00	1.00		
Satd. Flow (prot)		2707	3406	2707		
Flt Permitted		1.00	1.00	1.00		
Satd. Flow (perm)		2707	3406	2707		
Peak-hour factor, PHF	0.92	0.92	0.87	0.84	0.92	0.92
Adj. Flow (vph)	0	1049	402	1333	0	0
RTOR Reduction (vph)	0	755	0	351	0	0
Lane Group Flow (vph)	0	294	402	982	0	0
Confl. Peds. (#/hr)		9				
Heavy Vehicles (%)	2%	5%	6%	5%	2%	2%
Turn Type		custom	NA	custom		
Protected Phases		4 5	1 2 3 8	1 2 3 4		
Permitted Phases				5 8		
Actuated Green, G (s)		24.0	68.0	88.0		
Effective Green, g (s)		24.0	64.0	84.0		
Actuated g/C Ratio		0.21	0.56	0.74		
Clearance Time (s)						
Lane Grp Cap (vph)		569	1912	1994		
v/s Ratio Prot		c0.11	0.12	c0.32		
v/s Ratio Perm				0.05		
v/c Ratio		0.52	0.21	0.49		
Uniform Delay, d1		39.9	12.4	6.2		
Progression Factor		1.00	0.87	19.75		
Incremental Delay, d2		3.3	0.2	0.6		
Delay (s)		43.2	10.9	122.9		
Level of Service		D	B	F		
Approach Delay (s)	43.2		97.0		0.0	
Approach LOS	D		F		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		76.7		HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio		0.53				
Actuated Cycle Length (s)		114.0		Sum of lost time (s)	31.0	
Intersection Capacity Utilization		51.9%		ICU Level of Service	A	
Analysis Period (min)		15				
c Critical Lane Group						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations														
Traffic Volume (vph)	0	365	0	0	1020	305								
Future Volume (vph)	0	365	0	0	1020	305								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Satd. Flow (prot)	0	1565	0	0	3438	1509								
Flt Permitted														
Satd. Flow (perm)	0	1536	0	0	3438	1467								
Right Turn on Red		Yes				Yes								
Satd. Flow (RTOR)		314				197								
Link Speed (mph)	30			30	30									
Link Distance (ft)	572			272	244									
Travel Time (s)	13.0			6.2	5.5									
Confl. Peds. (#/hr)		23				17								
Peak Hour Factor	0.92	0.81	0.92	0.92	0.95	0.95								
Heavy Vehicles (%)	2%	5%	2%	2%	5%	7%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	451	0	0	1074	321								
Turn Type		Free			NA	Free								
Protected Phases				1 2 4 5			1	2	3	4	5	6	7	8
Permitted Phases		Free			6 8	Free								
Minimum Split (s)							10.0	19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)							35.0	14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)							31%	12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)							4.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)														
Total Lost Time (s)														
Lead/Lag							Lead	Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?														
Act Effect Green (s)		114.0			93.0	114.0								
Actuated g/C Ratio		1.00			0.82	1.00								
v/c Ratio		0.29			0.38	0.22								
Control Delay		0.5			0.8	0.2								
Queue Delay		0.0			0.5	0.0								
Total Delay		0.5			1.2	0.2								
LOS		A			A	A								
Approach Delay	0.5				1.0									
Approach LOS	A				A									
Queue Length 50th (ft)		0			15	0								
Queue Length 95th (ft)		0			14	m0								
Internal Link Dist (ft)	492			192	164									
Turn Bay Length (ft)														
Base Capacity (vph)		1536			2804	1467								
Starvation Cap Reductn		0			1138	0								
Spillback Cap Reductn		21			48	0								
Storage Cap Reductn		0			0	0								
Reduced v/c Ratio		0.30			0.64	0.22								

#### Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 0.9

Intersection LOS: A

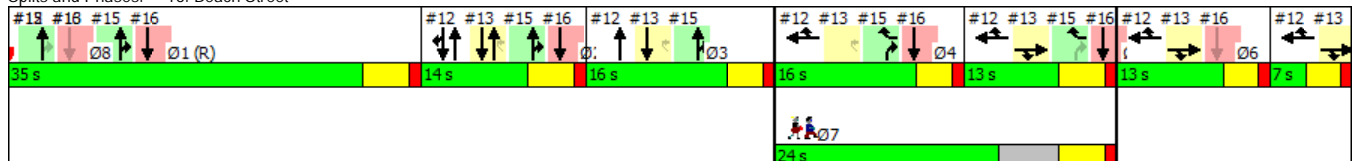
Intersection Capacity Utilization 44.4%










ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.










Splits and Phases: 16: Beach Street



						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	365	0	0	1020	305
Future Volume (vph)	0	365	0	0	1020	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			5.0	4.0
Lane Util. Factor		1.00			0.95	1.00
Frbp, ped/bikes		0.98			1.00	0.97
Flpb, ped/bikes		1.00			1.00	1.00
Frt		0.86			1.00	0.85
Flt Protected		1.00			1.00	1.00
Satd. Flow (prot)		1536			3438	1467
Flt Permitted		1.00			1.00	1.00
Satd. Flow (perm)		1536			3438	1467
Peak-hour factor, PHF	0.92	0.81	0.92	0.92	0.95	0.95
Adj. Flow (vph)	0	451	0	0	1074	321
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	451	0	0	1074	321
Confl. Peds. (#/hr)		23				17
Heavy Vehicles (%)	2%	5%	2%	2%	5%	7%
Turn Type		Free			NA	Free
Protected Phases					1 2 4 5	
Permitted Phases		Free			6 8	Free
Actuated Green, G (s)		114.0			84.0	114.0
Effective Green, g (s)		114.0			76.0	114.0
Actuated g/C Ratio		1.00			0.67	1.00
Clearance Time (s)						
Lane Grp Cap (vph)		1536			2442	1467
v/s Ratio Prot					c0.25	
v/s Ratio Perm		c0.29			0.07	0.22
v/c Ratio		0.29			0.44	0.22
Uniform Delay, d1		0.0			9.0	0.0
Progression Factor		1.00			0.17	1.00
Incremental Delay, d2		0.5			0.4	0.2
Delay (s)		0.5			1.9	0.2
Level of Service		A			A	A
Approach Delay (s)	0.5			0.0	1.5	
Approach LOS	A			A	A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		1.3			HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio		0.49				
Actuated Cycle Length (s)		114.0			Sum of lost time (s)	31.0
Intersection Capacity Utilization		44.4%			ICU Level of Service	A
Analysis Period (min)		15				
c Critical Lane Group						










13796.00 :: Suffolk Downs Redevelopment  
7: Route 1A & Waldemar Avenue

2017 Existing Conditions  
Morning Peak Hou

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	130	1075	70	0	2465
Future Volume (vph)	0	130	1075	70	0	2465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1774	3258	0	0	3438
Flt Permitted						
Satd. Flow (perm)	0	1774	3258	0	0	3438
Link Speed (mph)	30		30			30
Link Distance (ft)	1034		925			475
Travel Time (s)	23.5		21.0			10.8
Confl. Peds. (#/hr)				1	1	
Confl. Bikes (#/hr)						
Peak Hour Factor	0.80	0.80	0.91	0.91	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	9%	22%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	163	1258	0	0	2568
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	71.5%			ICU Level of Service C		
Analysis Period (min)	15					













13796.00 :: Suffolk Downs Redevelopment  
7: Route 1A & Waldemar Avenue

2017 Existing Conditions  
Morning Peak Hou

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	130	1075	70	0	2465
Future Volume (Veh/h)	0	130	1075	70	0	2465
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.91	0.91	0.96	0.96
Hourly flow rate (vph)	0	163	1181	77	0	2568
Pedestrians	1					
Lane Width (ft)	16.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			925			880
pX, platoon unblocked	0.42	0.85			0.85	
vC, conflicting volume	2504	630			1259	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	258	217			955	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	303	662			619	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	163	787	471	1284	1284	
Volume Left	0	0	0	0	0	
Volume Right	163	0	77	0	0	
cSH	662	1700	1700	1700	1700	
Volume to Capacity	0.25	0.46	0.28	0.76	0.76	
Queue Length 95th (ft)	24	0	0	0	0	
Control Delay (s)	12.2	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	12.2	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			71.5%		ICU Level of Service	C
Analysis Period (min)			15			

13796.00 :: Suffolk Downs Redevelopment  
8: Route 1A & Tomasello Dr

2017 Existing Conditions  
Morning Peak Hou

							
Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	205	10	55	1105	45	0	2205
Future Volume (vph)	205	10	55	1105	45	0	2205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	11	11	11	11
Grade (%)	0%			0%			0%
Storage Length (ft)	0	0	0		0	150	
Storage Lanes	1	1	0		0	1	
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1888	1595	0	3208	0	1837	3323
Flt Permitted	0.950			0.998			
Satd. Flow (perm)	1888	1595	0	3208	0	1837	3323
Link Speed (mph)	30			30			30
Link Distance (ft)	5227			475			405
Travel Time (s)	118.8			10.8			9.2
Confl. Peds. (#/hr)		2			2	2	
Confl. Bikes (#/hr)							
Peak Hour Factor	0.72	0.72	0.94	0.94	0.94	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	8%	2%	8%	13%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%			0%
Shared Lane Traffic (%)							
Lane Group Flow (vph)	285	14	0	1283	0	0	2273
Sign Control	Stop			Free			Free

Intersection Summary

Area Type: Other













Control Type: Unsignalized

Intersection Capacity Utilization 91.0% ICU Level of Service E

Analysis Period (min) 15

13796.00 :: Suffolk Downs Redevelopment  
8: Route 1A & Tomasello Dr










2017 Existing Conditions  
Morning Peak Hou

							
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	205	10	55	1105	45	0	2205
Future Volume (Veh/h)	205	10	55	1105	45	0	2205
Sign Control	Stop			Free			Free
Grade	0%			0%			0%
Peak Hour Factor	0.72	0.72	0.94	0.94	0.94	0.97	0.97
Hourly flow rate (vph)	285	14	0	1176	48	0	2273
Pedestrians	2						2
Lane Width (ft)	14.0						11.0
Walking Speed (ft/s)	4.0						4.0
Percent Blockage	0						0
Right turn flare (veh)							
Median type				None			None
Median storage (veh)							
Upstream signal (ft)							405
pX, platoon unblocked	0.33		0.00				
vC, conflicting volume	2338	616	0			1226	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	984	616	0			1226	
tC, single (s)	6.8	7.1	0.0			4.1	
tC, 2 stage (s)							
tF (s)	3.5	3.4	0.0			2.2	
p0 queue free %	0	97	0			100	
cM capacity (veh/h)	80	418	0			574	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	285	14	784	440	0	1136	1136
Volume Left	285	0	0	0	0	0	0
Volume Right	0	14	0	48	0	0	0
cSH	80	418	1700	1700	1700	1700	1700
Volume to Capacity	3.54	0.03	0.46	0.26	0.00	0.67	0.67
Queue Length 95th (ft)	Err	3	0	0	0	0	0
Control Delay (s)	Err	13.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	9531.5		0.0		0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			750.8				
Intersection Capacity Utilization			91.0%		ICU Level of Service		E
Analysis Period (min)			15				












13796.00 :: Suffolk Downs Redevelopment  
10: Route 1A & Furlong St

2017 Existing Conditions  
Morning Peak Hou

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	40	1130	35	0	2235
Future Volume (vph)	0	40	1130	35	0	2235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	11	11	11	11
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1514	3156	0	0	3292
Flt Permitted						
Satd. Flow (perm)	0	1514	3156	0	0	3292
Link Speed (mph)	30		30			30
Link Distance (ft)	911		2394			546
Travel Time (s)	20.7		54.4			12.4
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.89	0.89	0.95	0.95	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	23%	10%	11%	0%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	45	1226	0	0	2456
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	65.1%			ICU Level of Service C		
Analysis Period (min)	15					













13796.00 :: Suffolk Downs Redevelopment  
10: Route 1A & Furlong St

2017 Existing Conditions  
Morning Peak Hou

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	40	1130	35	0	2235
Future Volume (Veh/h)	0	40	1130	35	0	2235
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.89	0.89	0.95	0.95	0.91	0.91
Hourly flow rate (vph)	0	45	1189	37	0	2456
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2436	613			1226	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2436	613			1226	
tC, single (s)	6.8	7.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.5			2.2	
p0 queue free %	100	88			100	
cM capacity (veh/h)	27	387			576	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	45	793	433	1228	1228	
Volume Left	0	0	0	0	0	
Volume Right	45	0	37	0	0	
cSH	387	1700	1700	1700	1700	
Volume to Capacity	0.12	0.47	0.25	0.72	0.72	
Queue Length 95th (ft)	10	0	0	0	0	
Control Delay (s)	15.5	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	15.5	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			65.1%	ICU Level of Service		C
Analysis Period (min)			15			

13796.00 :: Suffolk Downs Redevelopment  
45: Bennington Street & Crescent Ave

2017 Existing Conditions  
Morning Peak Hou

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			 
Traffic Volume (vph)	170	280	260	0	0	1040
Future Volume (vph)	170	280	260	0	0	1040
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1599	1403	3539	0	0	3353
Flt Permitted	0.950					
Satd. Flow (perm)	1599	1403	3539	0	0	3353
Link Speed (mph)	30		30			30
Link Distance (ft)	817		1471			233
Travel Time (s)	18.6		33.4			5.3
Confl. Peds. (#/hr)	1	1		84		
Confl. Bikes (#/hr)						
Peak Hour Factor	0.84	0.84	0.89	0.89	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	3%	2%	0%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	1	1		1		1
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	202	333	292	0	0	1182
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other











Control Type: Unsignalized

Intersection Capacity Utilization 45.0% ICU Level of Service A

Analysis Period (min) 15

13796.00 :: Suffolk Downs Redevelopment  
45: Bennington Street & Crescent Ave






















2017 Existing Conditions  
Morning Peak Hou

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	170	280	260	0	0	1040
Future Volume (Veh/h)	170	280	260	0	0	1040
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.84	0.84	0.89	0.89	0.88	0.88
Hourly flow rate (vph)	202	333	292	0	0	1182
Pedestrians	84		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	7		0			0
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						233
pX, platoon unblocked						
vC, conflicting volume	968	231			376	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	968	231			376	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	14	53			100	
cM capacity (veh/h)	235	714			1110	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	202	333	146	146	591	591
Volume Left	202	0	0	0	0	0
Volume Right	0	333	0	0	0	0
cSH	235	714	1700	1700	1700	1700
Volume to Capacity	0.86	0.47	0.09	0.09	0.35	0.35
Queue Length 95th (ft)	172	62	0	0	0	0
Control Delay (s)	71.7	14.4	0.0	0.0	0.0	0.0
Lane LOS	F	B				
Approach Delay (s)	36.0		0.0		0.0	
Approach LOS	E					
<b>Intersection Summary</b>						
Average Delay			9.6			
Intersection Capacity Utilization			45.0%		ICU Level of Service	A
Analysis Period (min)			15			

13796.00 :: Suffolk Downs Redevelopment  
6: Route 1A & Boardman St

2017 Existing Conditions













Timing Plan: Evening Peak Hou

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	75	15	80	175	25	200	40	45	2245	90	170	1440
Future Volume (vph)	75	15	80	175	25	200	40	45	2245	90	170	1440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	12	12	10	10	12	11	11	11	11	11
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	130		0	0		250		400		500	380	
Storage Lanes	1		0	0		1		1		1	1	
Taper Length (ft)	25			25				25			25	
Satd. Flow (prot)	1668	1477	0	0	1628	1436	0	1459	3355	1546	1728	3260
Flt Permitted	0.164				0.511			0.950			0.950	
Satd. Flow (perm)	286	1477	0	0	868	1436	0	1459	3355	1546	1728	3260
Right Turn on Red			Yes			No				Yes		
Satd. Flow (RTOR)		92								83		1
Link Speed (mph)		30			30				30			30
Link Distance (ft)		537			1355				733			925
Travel Time (s)		12.2			30.8				16.7			21.0
Confl. Peds. (#/hr)	7					7		1				
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.88	0.88	0.88	0.98	0.98	0.98	0.98	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	6%	9%	5%	0%	5%	0%	37%	4%	1%	1%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	8
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	86	109	0	0	227	227	0	87	2291	92	187	1604
Turn Type	Perm	NA		Perm	NA	pt+ov	Prot	Prot	NA	Prot	Prot	NA
Protected Phases		8			4	4 5	1	1	6	6	5	2
Permitted Phases	8			4								
Detector Phase	8	8		4	4	4 5	1	1	6	6	5	2
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		6.0	6.0	20.0	20.0	6.0	20.0
Minimum Split (s)	26.0	26.0		12.0	12.0		12.0	12.0	27.0	27.0	13.5	31.0
Total Split (s)	31.0	31.0		18.0	18.0		31.0	31.0	137.0	137.0	32.5	137.0
Total Split (%)	15.5%	15.5%		9.0%	9.0%		15.5%	15.5%	68.3%	68.3%	16.2%	68.3%
Yellow Time (s)	3.0	3.0		4.0	4.0		4.0	4.0	5.0	5.0	5.5	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	5.0	5.0			6.0			5.0	6.0	6.0	6.5	6.0
Lead/Lag							Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	None	Min	Min	None	Min
Act Effect Green (s)	26.0	26.0			25.0	55.8		17.2	131.0	131.0	24.3	139.6
Actuated g/C Ratio	0.13	0.13			0.13	0.28		0.09	0.66	0.66	0.12	0.70
v/c Ratio	2.32	0.40			2.08	0.56		0.69	1.04	0.09	0.89	0.70
Control Delay	696.7	23.4			552.1	67.3		114.6	62.4	2.9	123.0	20.1
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	696.7	23.4			552.1	67.3		114.6	62.4	2.9	123.0	20.1

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	20
Future Volume (vph)	20
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	1
Peak Hour Factor	0.91
Growth Factor	100%
Heavy Vehicles (%)	11%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effect Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

13796.00 :: Suffolk Downs Redevelopment  
6: Route 1A & Boardman St

2017 Existing Conditions  
Timing Plan: Evening Peak Hou

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
LOS	F	C			F	E		F	E	A	F	C
Approach Delay		320.3			309.7				62.0			30.8
Approach LOS		F			F				E			C
Queue Length 50th (ft)	~184	20			~472	257		114	~1716	4	245	615
Queue Length 95th (ft)	#307	82			#649	349		179	#1820	28	#388	778
Internal Link Dist (ft)		457			1275				653			845
Turn Bay Length (ft)	130					250		400		500	380	
Base Capacity (vph)	37	273			109	415		190	2211	1046	226	2289
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	2.32	0.40			2.08	0.55		0.46	1.04	0.09	0.83	0.70

Intersection Summary

Area Type: Other

Cycle Length: 200.5

Actuated Cycle Length: 198.8

Natural Cycle: 150

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 2.32

Intersection Signal Delay: 83.8

Intersection LOS: F

Intersection Capacity Utilization 104.6%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Route 1A & Boardman St

 Ø1	 Ø2	 Ø4
31 s	137 s	18 s
 Ø5	 Ø6	 Ø8
32.5 s	137 s	31 s
























Lane Group	SBR
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	



13796.00 :: Suffolk Downs Redevelopment  
6: Route 1A & Boardman St

2017 Existing Conditions  
Timing Plan: Evening Peak Hou
















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	75	15	80	175	25	200	40	45	2245	90	170	1440
Future Volume (vph)	75	15	80	175	25	200	40	45	2245	90	170	1440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	12	12	10	10	12	11	11	11	11	11
Total Lost time (s)	5.0	5.0			6.0	6.0		5.0	6.0	6.0	6.5	6.0
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00	0.95	1.00	1.00	0.95
Frpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	0.99	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87			1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00			0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1655	1478			1628	1436		1459	3355	1546	1728	3260
Flt Permitted	0.16	1.00			0.51	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	286	1478			868	1436		1459	3355	1546	1728	3260
Peak-hour factor, PHF	0.87	0.87	0.87	0.88	0.88	0.88	0.98	0.98	0.98	0.98	0.91	0.91
Adj. Flow (vph)	86	17	92	199	28	227	41	46	2291	92	187	1582
RTOR Reduction (vph)	0	80	0	0	0	0	0	0	0	28	0	0
Lane Group Flow (vph)	86	29	0	0	227	227	0	87	2291	64	187	1604
Confl. Peds. (#/hr)	7					7		1				
Confl. Bikes (#/hr)												
Heavy Vehicles (%)	1%	6%	9%	5%	0%	5%	0%	37%	4%	1%	1%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	8
Turn Type	Perm	NA		Perm	NA	pt+ov	Prot	Prot	NA	Prot	Prot	NA
Protected Phases		8			4	4 5	1	1	6	6	5	2
Permitted Phases	8			4								
Actuated Green, G (s)	26.0	26.0			25.0	54.3		16.2	130.0	130.0	23.3	138.6
Effective Green, g (s)	26.0	26.0			25.0	54.3		17.2	131.0	131.0	24.3	139.6
Actuated g/C Ratio	0.13	0.13			0.13	0.27		0.09	0.66	0.66	0.12	0.70
Clearance Time (s)	5.0	5.0			6.0			6.0	7.0	7.0	7.5	7.0
Vehicle Extension (s)	2.0	2.0			2.0			2.0	4.0	4.0	2.0	4.0
Lane Grp Cap (vph)	37	193			109	392		126	2210	1018	211	2289
v/s Ratio Prot		0.02				0.16		0.06	c0.68	0.04	c0.11	c0.49
v/s Ratio Perm	c0.30				0.26							
v/c Ratio	2.32	0.15			2.08	0.58		0.69	1.04	0.06	0.89	0.70
Uniform Delay, d1	86.4	76.6			86.9	62.4		88.2	33.9	12.1	85.9	17.4
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	671.7	0.1			517.1	1.3		12.4	29.4	0.0	32.0	1.1
Delay (s)	758.1	76.7			604.0	63.7		100.6	63.3	12.1	117.9	18.4
Level of Service	F	E			F	E		F	E	B	F	B
Approach Delay (s)		377.2			333.8				62.7			28.8
Approach LOS		F			F				E			C
<b>Intersection Summary</b>												
HCM 2000 Control Delay			87.9				HCM 2000 Level of Service		F			
HCM 2000 Volume to Capacity ratio			1.21									
Actuated Cycle Length (s)			198.8				Sum of lost time (s)		19.5			
Intersection Capacity Utilization			104.6%				ICU Level of Service		G			
Analysis Period (min)			15									
<b>c Critical Lane Group</b>												

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	20
Future Volume (vph)	20
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	22
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	1
Confl. Bikes (#/hr)	1
Heavy Vehicles (%)	11%
Bus Blockages (#/hr)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

13796.00 :: Suffolk Downs Redevelopment  
9: Route 1A & Jughandle

2017 Existing Conditions













Timing Plan: Evening Peak Hou

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	10	5	0	0	0	0	2235	0	0	1620	0
Future Volume (vph)	125	10	5	0	0	0	0	2235	0	0	1620	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	12	12	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1847	0	0	0	0	0	3355	0	0	3355	0
Flt Permitted		0.957										
Satd. Flow (perm)	0	1847	0	0	0	0	0	3355	0	0	3355	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		122			363			405			225	
Travel Time (s)		2.8			8.3			9.2			5.1	
Confl. Peds. (#/hr)									1			
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.25	0.25	0.25	0.97	0.97	0.97	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	88%	0%	2%	2%	2%	0%	4%	0%	0%	4%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	175	0	0	0	0	0	2304	0	0	1705	0
Turn Type	Perm	NA						NA			NA	
Protected Phases		2						1			1	
Permitted Phases	2											
Detector Phase	2	2						1			1	
Switch Phase												
Minimum Initial (s)	10.0	10.0						20.0			20.0	
Minimum Split (s)	16.0	16.0						27.0			27.0	
Total Split (s)	36.0	36.0						55.0			55.0	
Total Split (%)	39.6%	39.6%						60.4%			60.4%	
Yellow Time (s)	4.0	4.0						5.0			5.0	
All-Red Time (s)	2.0	2.0						2.0			2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.0						7.0			7.0	
Lead/Lag	Lag	Lag						Lead			Lead	
Lead-Lag Optimize?												
Recall Mode	None	None						Max			Max	
Act Effct Green (s)		13.3						48.1			48.1	
Actuated g/C Ratio		0.18						0.65			0.65	
v/c Ratio		0.53						1.06			0.79	
Control Delay		33.4						54.8			13.5	
Queue Delay		0.0						0.0			0.0	
Total Delay		33.4						54.8			13.5	

13796.00 :: Suffolk Downs Redevelopment  
 9: Route 1A & Jughandle

2017 Existing Conditions

Timing Plan: Evening Peak Hou

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		C						D			B	
Approach Delay		33.4						54.8			13.5	
Approach LOS		C						D			B	
Queue Length 50th (ft)		73						~622			254	
Queue Length 95th (ft)		114						#838			422	
Internal Link Dist (ft)		42			283			325			145	
Turn Bay Length (ft)												
Base Capacity (vph)		747						2168			2168	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.23						1.06			0.79	

Intersection Summary

Area Type: Other

Cycle Length: 91

Actuated Cycle Length: 74.4

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 37.1

Intersection LOS: D

Intersection Capacity Utilization 80.9%

ICU Level of Service D

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.
















Splits and Phases: 9: Route 1A & Jughandle



13796.00 :: Suffolk Downs Redevelopment  
9: Route 1A & Jughandle

2017 Existing Conditions

Timing Plan: Evening Peak Hou

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	10	5	0	0	0	0	2235	0	0	1620	0
Future Volume (vph)	125	10	5	0	0	0	0	2235	0	0	1620	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	16	16	16	12	12	12	11	11	11	11	11	11
Total Lost time (s)		6.0						7.0			7.0	
Lane Util. Factor		1.00						0.95			0.95	
Frpb, ped/bikes		1.00						1.00			1.00	
Flpb, ped/bikes		1.00						1.00			1.00	
Frt		1.00						1.00			1.00	
Flt Protected		0.96						1.00			1.00	
Satd. Flow (prot)		1849						3355			3355	
Flt Permitted		0.96						1.00			1.00	
Satd. Flow (perm)		1849						3355			3355	
Peak-hour factor, PHF	0.80	0.80	0.80	0.25	0.25	0.25	0.97	0.97	0.97	0.95	0.95	0.95
Adj. Flow (vph)	156	12	6	0	0	0	0	2304	0	0	1705	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	173	0	0	0	0	0	2304	0	0	1705	0
Confl. Peds. (#/hr)									1			
Heavy Vehicles (%)	5%	88%	0%	2%	2%	2%	0%	4%	0%	0%	4%	0%
Turn Type	Perm	NA						NA			NA	
Protected Phases		2						1			1	
Permitted Phases	2											
Actuated Green, G (s)		13.3						48.1			48.1	
Effective Green, g (s)		13.3						48.1			48.1	
Actuated g/C Ratio		0.18						0.65			0.65	
Clearance Time (s)		6.0						7.0			7.0	
Vehicle Extension (s)		4.0						4.0			4.0	
Lane Grp Cap (vph)		330						2169			2169	
v/s Ratio Prot								c0.69			0.51	
v/s Ratio Perm		0.09										
v/c Ratio		0.53						1.06			0.79	
Uniform Delay, d1		27.7						13.2			9.5	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		2.0						38.4			3.0	
Delay (s)		29.7						51.5			12.4	
Level of Service		C						D			B	
Approach Delay (s)		29.7			0.0			51.5			12.4	
Approach LOS		C			A			D			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			34.7				HCM 2000 Level of Service				C	
HCM 2000 Volume to Capacity ratio			0.95									
Actuated Cycle Length (s)			74.4				Sum of lost time (s)			13.0		
Intersection Capacity Utilization			80.9%				ICU Level of Service			D		
Analysis Period (min)			15									
c Critical Lane Group												

13796.00 :: Suffolk Downs Redevelopment  
11: Route 1A on-ramp & Route 145

2017 Existing Conditions  
Timing Plan: Evening Peak Hou

	→	↘	↶	↙	←	↖	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↔	↑↑↑		
Traffic Volume (vph)	1350	180	30	235	1385	0	0
Future Volume (vph)	1350	180	30	235	1385	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	9	11	12	12
Grade (%)	0%				0%	0%	
Storage Length (ft)		500		130		0	0
Storage Lanes		0		1		0	0
Taper Length (ft)				25		25	
Satd. Flow (prot)	4842	0	0	1500	4951	0	0
Flt Permitted				0.950			
Satd. Flow (perm)	4842	0	0	1498	4951	0	0
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	78						
Link Speed (mph)	30				30	30	
Link Distance (ft)	572				1857	345	
Travel Time (s)	13.0				42.2	7.8	
Confl. Peds. (#/hr)		8		8			
Confl. Bikes (#/hr)							
Peak Hour Factor	0.93	0.93	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	4%	3%	9%	1%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	2	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%				0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1646	0	0	279	1458	0	0
Turn Type	NA		Prot	Prot	NA		
Protected Phases	2		1	1	1 2		
Permitted Phases							
Detector Phase	2		1	1	1 2		
Switch Phase							
Minimum Initial (s)	8.0		8.0	8.0			
Minimum Split (s)	13.0		13.0	13.0			
Total Split (s)	24.0		17.0	17.0			
Total Split (%)	58.5%		41.5%	41.5%			
Yellow Time (s)	3.5		3.5	3.5			
All-Red Time (s)	1.5		1.5	1.5			
Lost Time Adjust (s)	0.0			0.0			
Total Lost Time (s)	5.0			5.0			
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?							
Recall Mode	Min		None	None			
Act Effect Green (s)	19.0			11.5	40.5		
Actuated g/C Ratio	0.47			0.28	1.00		
v/c Ratio	0.71			0.66	0.29		
Control Delay	10.4			22.3	0.2		
Queue Delay	0.0			0.0	0.0		
Total Delay	10.4			22.3	0.2		

13796.00 :: Suffolk Downs Redevelopment  
 11: Route 1A on-ramp & Route 145

2017 Existing Conditions

Timing Plan: Evening Peak Hou

	→	↘	↶	↙	←	↖	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
LOS	B			C	A		
Approach Delay	10.4				3.7		
Approach LOS	B				A		
Queue Length 50th (ft)	95			55	0		
Queue Length 95th (ft)	136			#135	0		
Internal Link Dist (ft)	492				1777	265	
Turn Bay Length (ft)				130			
Base Capacity (vph)	2314			445	4887		
Starvation Cap Reductn	0			0	0		
Spillback Cap Reductn	0			0	0		
Storage Cap Reductn	0			0	0		
Reduced v/c Ratio	0.71			0.63	0.30		

Intersection Summary

Area Type: Other

Cycle Length: 41

Actuated Cycle Length: 40.5

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 7.0

Intersection LOS: A

Intersection Capacity Utilization 53.2%



ICU Level of Service A

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 11: Route 1A on-ramp & Route 145




















 Ø1	 Ø2
17 s	24 s

13796.00 :: Suffolk Downs Redevelopment  
11: Route 1A on-ramp & Route 145

2017 Existing Conditions  
Timing Plan: Evening Peak Hou

	→	↘	↶	↙	←	↖	↗
Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↔	↑↑↑		
Traffic Volume (vph)	1350	180	30	235	1385	0	0
Future Volume (vph)	1350	180	30	235	1385	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	9	11	12	12
Total Lost time (s)	5.0			5.0	5.0		
Lane Util. Factor	0.91			1.00	0.91		
Frpb, ped/bikes	1.00			1.00	1.00		
Flpb, ped/bikes	1.00			1.00	1.00		
Frt	0.98			1.00	1.00		
Flt Protected	1.00			0.95	1.00		
Satd. Flow (prot)	4843			1500	4951		
Flt Permitted	1.00			0.95	1.00		
Satd. Flow (perm)	4843			1500	4951		
Peak-hour factor, PHF	0.93	0.93	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1452	194	32	247	1458	0	0
RTOR Reduction (vph)	41	0	0	0	0	0	0
Lane Group Flow (vph)	1605	0	0	279	1458	0	0
Confl. Peds. (#/hr)		8		8			
Heavy Vehicles (%)	1%	4%	3%	9%	1%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	2	0	0
Turn Type	NA		Prot	Prot	NA		
Protected Phases	2		1	1	1 2		
Permitted Phases							
Actuated Green, G (s)	19.0			11.5	40.5		
Effective Green, g (s)	19.0			11.5	40.5		
Actuated g/C Ratio	0.47			0.28	1.00		
Clearance Time (s)	5.0			5.0			
Vehicle Extension (s)	2.0			2.0			
Lane Grp Cap (vph)	2272			425	4951		
v/s Ratio Prot	c0.33			c0.19	0.29		
v/s Ratio Perm							
v/c Ratio	0.71			0.66	0.29		
Uniform Delay, d1	8.5			12.8	0.0		
Progression Factor	1.00			1.00	1.00		
Incremental Delay, d2	0.8			2.8	0.0		
Delay (s)	9.4			15.5	0.0		
Level of Service	A			B	A		
Approach Delay (s)	9.4				2.5	0.0	
Approach LOS	A				A	A	
<b>Intersection Summary</b>							
HCM 2000 Control Delay			5.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.69				
Actuated Cycle Length (s)			40.5		Sum of lost time (s)		10.0
Intersection Capacity Utilization			53.2%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							






												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SBR2
Lane Configurations												
Traffic Volume (vph)	15	230	10	765	440	105	75	1020	1170	430	10	5
Future Volume (vph)	15	230	10	765	440	105	75	1020	1170	430	10	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	16	12	12	12	12	12	14	16	12	12
Grade (%)		0%			0%			0%		0%		
Storage Length (ft)	50		0	0		0			0		0	
Storage Lanes	1		1	2		0			1		0	
Taper Length (ft)	25			25								
Satd. Flow (prot)	0	3328	1816	3502	1777	0	0	3574	1706	3951	0	0
Flt Permitted		0.997		0.950								
Satd. Flow (perm)	0	3327	1816	3446	1777	0	0	3574	1706	3951	0	0
Right Turn on Red			Yes				No		Yes			Yes
Satd. Flow (RTOR)			126						94	1		
Link Speed (mph)		30			30			30		30		
Link Distance (ft)		485			572			480		673		
Travel Time (s)		11.0			13.0			10.9		15.3		
Confl. Peds. (#/hr)	4		7	7		2	4				1	2
Confl. Bikes (#/hr)							1					
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.91	0.92	0.92	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	0%	0%	2%	1%	0%	1%	1%	3%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%		0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	261	11	841	681	0	0	1109	1272	500	0	0
Turn Type	Split	NA	Prot	Split	NA			NA	custom	NA		
Protected Phases	4	4	4	3	3			6	2 3	2		
Permitted Phases												
Detector Phase	4	4	4	3	3			6	2 3	2		
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0			8.0		8.0		
Minimum Split (s)	20.0	20.0	20.0	28.0	28.0			15.0		20.0		
Total Split (s)	22.0	22.0	22.0	42.0	42.0			57.0		57.0		
Total Split (%)	15.4%	15.4%	15.4%	29.5%	29.5%			40.0%		40.0%		
Yellow Time (s)	4.0	4.0	4.0	3.0	3.0			4.0		4.0		
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0			3.0		3.0		
Lost Time Adjust (s)		-1.0	-1.0	-1.0	-1.0			-1.0		-1.0		
Total Lost Time (s)		6.0	6.0	5.0	5.0			6.0		6.0		
Lead/Lag	Lag	Lag	Lag	Lead	Lead							
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None			Min		Min		
Act Effect Green (s)		15.3	15.3	37.0	37.0			51.0	93.0	51.0		
Actuated g/C Ratio		0.11	0.11	0.26	0.26			0.36	0.66	0.36		
v/c Ratio		0.73	0.04	0.92	1.47			0.86	1.11	0.35		
Control Delay		73.8	0.2	67.0	260.4			50.4	83.7	34.2		
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0	0.0		
Total Delay		73.8	0.2	67.0	260.4			50.4	83.7	34.2		

13796.00 :: Suffolk Downs Redevelopment  
 31: Route 16 & Winthrop Avenue/Route 145 & Harris Street

2017 Existing Conditions













Timing Plan: Evening Peak Hou

		
Lane Group	SEL	SER
Lane Configurations		
Traffic Volume (vph)	130	20
Future Volume (vph)	130	20
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)	0	0
Storage Lanes	1	0
Taper Length (ft)	25	
Satd. Flow (prot)	1754	0
Flt Permitted	0.958	
Satd. Flow (perm)	1754	0
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)	30	
Link Distance (ft)	302	
Travel Time (s)	6.9	
Confl. Peds. (#/hr)		7
Confl. Bikes (#/hr)		
Peak Hour Factor	0.82	0.82
Growth Factor	100%	100%
Heavy Vehicles (%)	0%	11%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		1
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	183	0
Turn Type	Prot	
Protected Phases	7	
Permitted Phases		
Detector Phase	7	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	20.0	
Total Split (s)	21.5	
Total Split (%)	15.1%	
Yellow Time (s)	3.5	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	-1.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Recall Mode	None	
Act Effct Green (s)	16.0	
Actuated g/C Ratio	0.11	
v/c Ratio	0.93	
Control Delay	109.5	
Queue Delay	0.0	
Total Delay	109.5	

13796.00 :: Suffolk Downs Redevelopment  
 31: Route 16 & Winthrop Avenue/Route 145 & Harris Street

2017 Existing Conditions

Timing Plan: Evening Peak Hou

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SBR2
LOS		E	A	E	F			D	F	C		
Approach Delay		70.8			153.5			68.2		34.2		
Approach LOS		E			F			E		C		
Queue Length 50th (ft)		124	0	394	-867			502	~1316	178		
Queue Length 95th (ft)		175	0	#514	#1109			597	#1586	224		
Internal Link Dist (ft)		405			492			400		593		
Turn Bay Length (ft)												
Base Capacity (vph)		375	316	913	463			1285	1151	1421		
Starvation Cap Reductn		0	0	0	0			0	0	0		
Spillback Cap Reductn		0	0	0	0			0	0	0		
Storage Cap Reductn		0	0	0	0			0	0	0		
Reduced v/c Ratio		0.70	0.03	0.92	1.47			0.86	1.11	0.35		

Intersection Summary

Area Type: Other

Cycle Length: 142.5

Actuated Cycle Length: 141.8

Natural Cycle: 150

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.47

Intersection Signal Delay: 93.1

Intersection LOS: F

Intersection Capacity Utilization 97.8%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

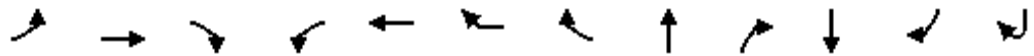
Queue shown is maximum after two cycles.

Splits and Phases: 31: Route 16 & Winthrop Avenue/Route 145 & Harris Street

											
57 s			42 s			22 s			21.5 s		
											
57 s											



Lane Group	SEL	SER
LOS	F	
Approach Delay	109.5	
Approach LOS	F	
Queue Length 50th (ft)	171	
Queue Length 95th (ft)	#276	
Internal Link Dist (ft)	222	
Turn Bay Length (ft)		
Base Capacity (vph)	197	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.93	
Intersection Summary		






Movement	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SBR2
Lane Configurations		↔↔	↔	↔↔	↔			↔↔	↔	↔↔		
Traffic Volume (vph)	15	230	10	765	440	105	75	1020	1170	430	10	5
Future Volume (vph)	15	230	10	765	440	105	75	1020	1170	430	10	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	16	12	12	12	12	12	14	16	12	12
Total Lost time (s)		6.0	6.0	5.0	5.0			6.0	6.0	6.0		
Lane Util. Factor		0.95	1.00	0.97	1.00			0.95	1.00	0.95		
Frpb, ped/bikes		1.00	1.00	1.00	0.99			1.00	1.00	1.00		
Flpb, ped/bikes		1.00	1.00	1.00	1.00			1.00	1.00	1.00		
Frt		1.00	0.85	1.00	0.96			1.00	0.85	0.99		
Flt Protected		1.00	1.00	0.95	1.00			1.00	1.00	1.00		
Satd. Flow (prot)		3328	1816	3502	1777			3574	1706	3951		
Flt Permitted		1.00	1.00	0.95	1.00			1.00	1.00	1.00		
Satd. Flow (perm)		3328	1816	3502	1777			3574	1706	3951		
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.91	0.92	0.92	0.89	0.89	0.89
Adj. Flow (vph)	16	245	11	841	484	115	82	1109	1272	483	11	6
RTOR Reduction (vph)	0	0	10	0	0	0	0	0	32	1	0	0
Lane Group Flow (vph)	0	261	1	841	681	0	0	1109	1240	499	0	0
Confl. Peds. (#/hr)	4		7	7		2	4				1	2
Confl. Bikes (#/hr)							1					
Heavy Vehicles (%)	0%	1%	0%	0%	2%	1%	0%	1%	1%	3%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Turn Type	Split	NA	Prot	Split	NA			NA	custom	NA		
Protected Phases	4	4	4	3	3			6	2 3	2		
Permitted Phases												
Actuated Green, G (s)		14.3	14.3	36.0	36.0			50.0	93.0	50.0		
Effective Green, g (s)		15.3	15.3	37.0	37.0			51.0	94.0	51.0		
Actuated g/C Ratio		0.11	0.11	0.26	0.26			0.36	0.66	0.36		
Clearance Time (s)		7.0	7.0	6.0	6.0			7.0		7.0		
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0		3.0		
Lane Grp Cap (vph)		359	195	913	463			1285	1130	1421		
v/s Ratio Prot		c0.08	0.00	0.24	c0.38			0.31	c0.73	0.13		
v/s Ratio Perm												
v/c Ratio		0.73	0.01	0.92	1.47			0.86	1.10	0.35		
Uniform Delay, d1		61.2	56.5	51.0	52.4			42.2	23.9	33.3		
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00	1.00		
Incremental Delay, d2		7.2	0.0	14.3	223.4			6.2	57.6	0.2		
Delay (s)		68.4	56.5	65.3	275.8			48.4	81.5	33.4		
Level of Service		E	E	E	F			D	F	C		
Approach Delay (s)		67.9			159.5			66.1		33.4		
Approach LOS		E			F			E		C		
<b>Intersection Summary</b>												
HCM 2000 Control Delay			93.5			HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio			1.17									
Actuated Cycle Length (s)			141.8			Sum of lost time (s)			22.5			
Intersection Capacity Utilization			97.8%			ICU Level of Service			F			
Analysis Period (min)			15									

13796.00 :: Suffolk Downs Redevelopment  
 31: Route 16 & Winthrop Avenue/Route 145 & Harris Street

2017 Existing Conditions

Timing Plan: Evening Peak Hou

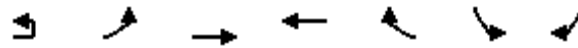
		
Movement	SEL	SER
Lane Configurations		
Traffic Volume (vph)	130	20
Future Volume (vph)	130	20
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	5.5	
Lane Util. Factor	1.00	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.98	
Flt Protected	0.96	
Satd. Flow (prot)	1755	
Flt Permitted	0.96	
Satd. Flow (perm)	1755	
Peak-hour factor, PHF	0.82	0.82
Adj. Flow (vph)	159	24
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	183	0
Confl. Peds. (#/hr)		7
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	11%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		1
Turn Type	Prot	
Protected Phases	7	
Permitted Phases		
Actuated Green, G (s)	15.0	
Effective Green, g (s)	16.0	
Actuated g/C Ratio	0.11	
Clearance Time (s)	6.5	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	198	
v/s Ratio Prot	c0.10	
v/s Ratio Perm		
v/c Ratio	0.92	
Uniform Delay, d1	62.3	
Progression Factor	1.00	
Incremental Delay, d2	42.9	
Delay (s)	105.2	
Level of Service	F	
Approach Delay (s)	105.2	
Approach LOS	F	
Intersection Summary		

c Critical Lane Group

13796.00 :: Suffolk Downs Redevelopment  
38: Route 145/Winthrop Ave & N Shore Rd

2017 Existing Conditions

Timing Plan: Evening Peak Hou

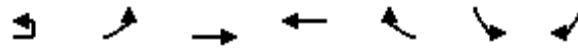


Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR	Ø3	Ø5
Lane Configurations									
Traffic Volume (vph)	5	260	1280	940	180	100	230		
Future Volume (vph)	5	260	1280	940	180	100	230		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	11	11	11	12	15	12		
Grade (%)			0%	0%		0%			
Storage Length (ft)		120			0	0	150		
Storage Lanes		1			0	1	1		
Taper Length (ft)		25				25			
Satd. Flow (prot)	0	1728	4951	4853	0	1947	1509		
Flt Permitted		0.950				0.950			
Satd. Flow (perm)	0	1728	4951	4853	0	1947	1509		
Right Turn on Red					Yes		Yes		
Satd. Flow (RTOR)				31			245		
Link Speed (mph)			30	30		30			
Link Distance (ft)			1857	236		865			
Travel Time (s)			42.2	5.4		19.7			
Confl. Peds. (#/hr)									
Confl. Bikes (#/hr)									
Peak Hour Factor	0.97	0.97	0.97	0.93	0.93	0.94	0.94		
Growth Factor	100%	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	0%	1%	1%	1%	0%	2%	7%		
Bus Blockages (#/hr)	0	0	2	0	0	0	0		
Parking (#/hr)									
Mid-Block Traffic (%)			0%	0%		0%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	273	1320	1205	0	106	245		
Turn Type	Prot	Prot	NA	NA		Prot	Prot		
Protected Phases	4	4	2	2 3		1	1	3	5
Permitted Phases									
Detector Phase	4	4	2	2 3		1	1		
Switch Phase									
Minimum Initial (s)	8.0	8.0	20.0			8.0	8.0	8.0	1.0
Minimum Split (s)	13.0	13.0	26.0			13.0	13.0	13.0	20.0
Total Split (s)	36.0	36.0	36.0			30.0	30.0	40.0	20.0
Total Split (%)	22.2%	22.2%	22.2%			18.5%	18.5%	25%	12%
Yellow Time (s)	4.0	4.0	4.0			4.0	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	2.0			1.0	1.0	1.0	1.0
Lost Time Adjust (s)		-1.0	-2.0			-1.0	-1.0		
Total Lost Time (s)		4.0	4.0			4.0	4.0		
Lead/Lag	Lag	Lag	Lag			Lead	Lead	Lead	
Lead-Lag Optimize?									
Recall Mode	None	None	Min			None	None	None	None
Act Effect Green (s)		28.4	32.3	72.7		26.2	26.2		
Actuated g/C Ratio		0.19	0.21	0.48		0.17	0.17		
v/c Ratio		0.84	1.24	0.51		0.31	0.53		
Control Delay		82.0	165.0	1.4		60.3	11.0		
Queue Delay		0.0	0.6	0.5		0.9	0.0		
Total Delay		82.0	165.6	1.9		61.2	11.0		



13796.00 :: Suffolk Downs Redevelopment  
 38: Route 145/Winthrop Ave & N Shore Rd

2017 Existing Conditions  
 Timing Plan: Evening Peak Hou



Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR	Ø3	Ø5
LOS		F	F	A		E	B		
Approach Delay			151.3	1.9		26.2			
Approach LOS			F	A		C			
Queue Length 50th (ft)		279	~668	1		101	0		
Queue Length 95th (ft)		#418	#766	m28		165	84		
Internal Link Dist (ft)			1777	156		785			
Turn Bay Length (ft)		120					150		
Base Capacity (vph)		370	1061	2358		339	465		
Starvation Cap Reductn		0	0	645		0	0		
Spillback Cap Reductn		0	119	0		94	0		
Storage Cap Reductn		0	0	0		0	0		
Reduced v/c Ratio		0.74	1.40	0.70		0.43	0.53		

Intersection Summary

Area Type: Other

Cycle Length: 162

Actuated Cycle Length: 150.6

Natural Cycle: 135

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.26

Intersection Signal Delay: 80.2

Intersection LOS: F

Intersection Capacity Utilization 61.1%

ICU Level of Service B

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

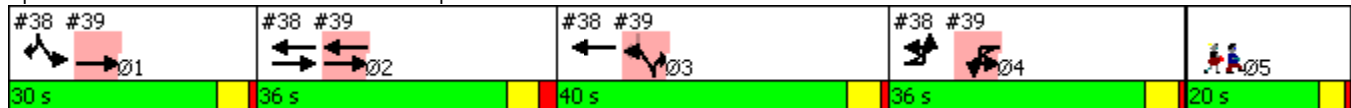
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

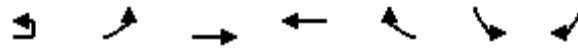
Splits and Phases: 38: Route 145/Winthrop Ave & N Shore Rd



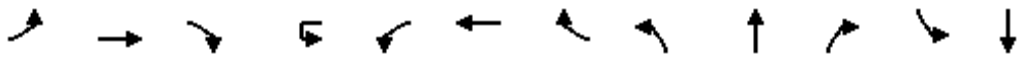
13796.00 :: Suffolk Downs Redevelopment  
38: Route 145/Winthrop Ave & N Shore Rd

2017 Existing Conditions

Timing Plan: Evening Peak Hou



Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↑↑↑	↑↑↑		↔	↔
Traffic Volume (vph)	5	260	1280	940	180	100	230
Future Volume (vph)	5	260	1280	940	180	100	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	11	12	15	12
Total Lost time (s)		4.0	4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	0.91	0.91		1.00	1.00
Frt		1.00	1.00	0.98		1.00	0.85
Flt Protected		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)		1728	4951	4852		1947	1509
Flt Permitted		0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)		1728	4951	4852		1947	1509
Peak-hour factor, PHF	0.97	0.97	0.97	0.93	0.93	0.94	0.94
Adj. Flow (vph)	5	268	1320	1011	194	106	245
RTOR Reduction (vph)	0	0	0	16	0	0	203
Lane Group Flow (vph)	0	273	1320	1189	0	106	42
Heavy Vehicles (%)	0%	1%	1%	1%	0%	2%	7%
Bus Blockages (#/hr)	0	0	2	0	0	0	0
Turn Type	Prot	Prot	NA	NA		Prot	Prot
Protected Phases	4	4	2	2 3		1	1
Permitted Phases							
Actuated Green, G (s)		27.4	30.3	71.6		25.2	25.2
Effective Green, g (s)		28.4	32.3	73.6		26.2	26.2
Actuated g/C Ratio		0.19	0.21	0.48		0.17	0.17
Clearance Time (s)		5.0	6.0			5.0	5.0
Vehicle Extension (s)		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)		322	1051	2347		335	259
v/s Ratio Prot		c0.16	c0.27	c0.25		c0.05	0.03
v/s Ratio Perm							
v/c Ratio		0.85	1.26	0.51		0.32	0.16
Uniform Delay, d1		59.8	59.9	26.8		55.1	53.6
Progression Factor		1.00	1.00	0.03		1.00	1.00
Incremental Delay, d2		18.9	123.0	0.1		0.5	0.3
Delay (s)		78.7	182.9	1.0		55.7	53.9
Level of Service		E	F	A		E	D
Approach Delay (s)			165.1	1.0		54.4	
Approach LOS			F	A		D	
<b>Intersection Summary</b>							
HCM 2000 Control Delay			90.0		HCM 2000 Level of Service		F
HCM 2000 Volume to Capacity ratio			0.70				
Actuated Cycle Length (s)			152.1		Sum of lost time (s)		20.0
Intersection Capacity Utilization			61.1%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							













												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↑↑↑			↓	↑↑↑		↑↑		↑		
Traffic Volume (vph)	0	1165	215	5	150	880	0	240	0	450	0	0
Future Volume (vph)	0	1165	215	5	150	880	0	240	0	450	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	11	12	9	11	12	10	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	0		0		100		0	0		100	0	
Storage Lanes	0		0		1		0	1		1	0	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	0	4850	0	0	1624	4951	0	3236	0	1599	0	0
Flt Permitted					0.950			0.950				
Satd. Flow (perm)	0	4850	0	0	1624	4951	0	3236	0	1599	0	0
Right Turn on Red			No				Yes			No		
Satd. Flow (RTOR)												
Link Speed (mph)		30				30			30			30
Link Distance (ft)		236				635			5227			589
Travel Time (s)		5.4				14.4			118.8			13.4
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.93	0.93	0.93	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	1%	0%	0%	1%	0%	1%	0%	1%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1500	0	0	170	967	0	258	0	484	0	0
Turn Type		NA		Prot	Prot	NA		Prot		Prot		
Protected Phases		1 2		4	4	2		3		3		
Permitted Phases												
Detector Phase		1 2		4	4	2		3		3		
Switch Phase												
Minimum Initial (s)				8.0	8.0	20.0		8.0		8.0		
Minimum Split (s)				13.0	13.0	26.0		13.0		13.0		
Total Split (s)				36.0	36.0	36.0		40.0		40.0		
Total Split (%)				22.2%	22.2%	22.2%		24.7%		24.7%		
Yellow Time (s)				4.0	4.0	4.0		4.0		4.0		
All-Red Time (s)				1.0	1.0	2.0		1.0		1.0		
Lost Time Adjust (s)					-1.0	-2.0		-1.0		-1.0		
Total Lost Time (s)					4.0	4.0		4.0		4.0		
Lead/Lag				Lag	Lag	Lag		Lead		Lead		
Lead-Lag Optimize?												
Recall Mode				None	None	Min		None		None		
Act Effect Green (s)		63.6			28.4	32.3		36.3		36.3		
Actuated g/C Ratio		0.42			0.19	0.21		0.24		0.24		
v/c Ratio		0.73			0.56	0.91		0.33		1.26		
Control Delay		34.9			64.2	71.4		50.7		180.3		
Queue Delay		7.6			0.0	0.0		0.0		0.0		
Total Delay		42.5			64.2	71.4		50.7		180.3		

13796.00 :: Suffolk Downs Redevelopment  
 39: Tomasello Dr/Shaws Driveway & Winthrop Ave/Route 145

2017 Existing Conditions

Timing Plan: Evening Peak Hou

Lane Group	SBR	Ø1	Ø5
Lane Configurations	↗		
Traffic Volume (vph)	0		
Future Volume (vph)	0		
Ideal Flow (vphpl)	1900		
Lane Width (ft)	16		
Grade (%)			
Storage Length (ft)	0		
Storage Lanes	1		
Taper Length (ft)			
Satd. Flow (prot)	2111		
Flt Permitted			
Satd. Flow (perm)	2111		
Right Turn on Red	No		
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Peak Hour Factor	0.92		
Growth Factor	100%		
Heavy Vehicles (%)	2%		
Bus Blockages (#/hr)	0		
Parking (#/hr)			
Mid-Block Traffic (%)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0		
Turn Type	Perm		
Protected Phases		1	5
Permitted Phases	3		
Detector Phase	3		
Switch Phase			
Minimum Initial (s)	8.0	8.0	1.0
Minimum Split (s)	13.0	13.0	20.0
Total Split (s)	40.0	30.0	20.0
Total Split (%)	24.7%	19%	12%
Yellow Time (s)	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		
Total Lost Time (s)	4.0		
Lead/Lag	Lead	Lead	
Lead-Lag Optimize?			
Recall Mode	None	None	None
Act Effect Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
LOS		D			E	E		D		F		
Approach Delay		42.5				70.4			135.2			
Approach LOS		D				E			F			
Queue Length 50th (ft)		270			163	379		120		-672		
Queue Length 95th (ft)		m132			247	#480		165		#905		
Internal Link Dist (ft)		156				555			5147			509
Turn Bay Length (ft)					100					100		
Base Capacity (vph)		2048			348	1061		781		385		
Starvation Cap Reductn		513			0	0		0		0		
Spillback Cap Reductn		0			0	0		0		0		
Storage Cap Reductn		0			0	0		0		0		
Reduced v/c Ratio		0.98			0.49	0.91		0.33		1.26		

**Intersection Summary**

Area Type: Other

Cycle Length: 162

Actuated Cycle Length: 150.6

Natural Cycle: 135

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.26

Intersection Signal Delay: 72.2

Intersection LOS: E

Intersection Capacity Utilization 73.8%

ICU Level of Service D

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

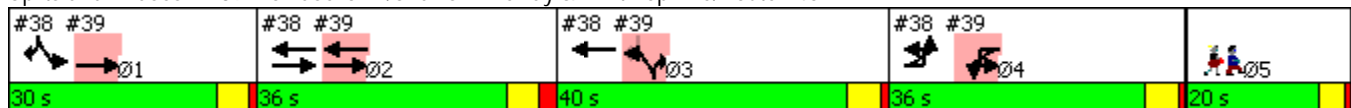
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.













m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 39: Tomasello Dr/Shaws Driveway &amp; Winthrop Ave/Route 145





Lane Group	SBR	Ø1	Ø5
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			
Intersection Summary			

												
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↑↑↑			↓	↑↑↑		↑↑		↑		
Traffic Volume (vph)	0	1165	215	5	150	880	0	240	0	450	0	0
Future Volume (vph)	0	1165	215	5	150	880	0	240	0	450	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	12	9	11	12	10	12	12	12	12
Total Lost time (s)		3.0			4.0	4.0		4.0		4.0		
Lane Util. Factor		0.91			1.00	0.91		0.97		1.00		
Frt		0.98			1.00	1.00		1.00		0.85		
Flt Protected		1.00			0.95	1.00		0.95		1.00		
Satd. Flow (prot)		4848			1624	4951		3236		1599		
Flt Permitted		1.00			0.95	1.00		0.95		1.00		
Satd. Flow (perm)		4848			1624	4951		3236		1599		
Peak-hour factor, PHF	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.93	0.93	0.93	0.92	0.92
Adj. Flow (vph)	0	1266	234	5	165	967	0	258	0	484	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1500	0	0	170	967	0	258	0	484	0	0
Heavy Vehicles (%)	0%	1%	1%	0%	0%	1%	0%	1%	0%	1%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0
Turn Type		NA		Prot	Prot	NA		Prot		Prot		
Protected Phases		1 2		4	4	2		3		3		
Permitted Phases												
Actuated Green, G (s)		60.5			27.4	30.3		35.3		35.3		
Effective Green, g (s)		62.5			28.4	32.3		36.3		36.3		
Actuated g/C Ratio		0.41			0.19	0.21		0.24		0.24		
Clearance Time (s)					5.0	6.0		5.0		5.0		
Vehicle Extension (s)					4.0	4.0		4.0		4.0		
Lane Grp Cap (vph)		1992			303	1051		772		381		
v/s Ratio Prot		c0.31			c0.10	c0.20		0.08		c0.30		
v/s Ratio Perm												
v/c Ratio		0.75			0.56	0.92		0.33		1.27		
Uniform Delay, d1		38.2			56.2	58.6		47.9		57.9		
Progression Factor		0.90			1.00	1.00		1.00		1.00		
Incremental Delay, d2		0.2			2.9	12.9		0.4		140.8		
Delay (s)		34.6			59.1	71.5		48.3		198.7		
Level of Service		C			E	E		D		F		
Approach Delay (s)		34.6				69.7			146.4			0.0
Approach LOS		C				E			F			A
<b>Intersection Summary</b>												
HCM 2000 Control Delay			71.0				HCM 2000 Level of Service			E		
HCM 2000 Volume to Capacity ratio			0.85									
Actuated Cycle Length (s)			152.1				Sum of lost time (s)			20.0		
Intersection Capacity Utilization			73.8%				ICU Level of Service			D		
Analysis Period (min)			15									
c Critical Lane Group												

13796.00 :: Suffolk Downs Redevelopment  
 39: Tomasello Dr/Shaws Driveway & Winthrop Ave/Route 145



















2017 Existing Conditions

Timing Plan: Evening Peak Hou















Movement	SBR
Lane Configurations	↗
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Lane Width	16
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	2%
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	3
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	250	230	0	0	0	335	335	80	35	170	130
Future Volume (vph)	75	250	230	0	0	0	335	335	80	35	170	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	12	12	12	10	11	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1666	1319	0	0	0	1501	1599	0	0	1669	1253
Flt Permitted		0.989					0.302				0.867	
Satd. Flow (perm)	0	1666	1319	0	0	0	477	1599	0	0	1458	1236
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			124					12				144
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		988			531			233			338	
Travel Time (s)		22.5			12.1			5.3			7.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)									1			1
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92	0.94	0.94	0.94	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	2%	2%	2%	2%	1%	0%	0%	0%	2%	3%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	2
Parking (#/hr)									1			1
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	357	253	0	0	0	356	441	0	0	228	144
Turn Type	Split	NA	Prot				D.P+P	NA		Perm	NA	Perm
Protected Phases	4	4	4				2	2 6			6	
Permitted Phases							6			6		6
Detector Phase	4	4	4				2	2 6		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0				5.0			5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0				12.0			10.0	10.0	10.0
Total Split (s)	41.0	41.0	41.0				31.0			25.0	25.0	25.0
Total Split (%)	33.3%	33.3%	33.3%				25.2%			20.3%	20.3%	20.3%
Yellow Time (s)	4.0	4.0	4.0				5.0			4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0				2.0			1.0	1.0	1.0
Lost Time Adjust (s)		-2.0	-2.0				-1.0				-2.0	0.0
Total Lost Time (s)		4.0	4.0				6.0				3.0	5.0
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None				Min			Max	Max	Max
Act Effect Green (s)		31.0	31.0				43.8	49.8			22.1	20.1
Actuated g/C Ratio		0.26	0.26				0.37	0.43			0.19	0.17
v/c Ratio		0.81	0.57				0.90	0.64			0.83	0.44
Control Delay		55.0	23.5				55.6	32.0			72.0	11.7
Queue Delay		0.0	0.0				0.0	0.0			0.0	0.0
Total Delay		55.0	23.5				55.6	32.0			72.0	11.7

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	26.0
Total Split (s)	26.0
Total Split (%)	21%
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effect Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		E	C				E	C			E	B
Approach Delay		42.0						42.5			48.6	
Approach LOS		D						D			D	
Queue Length 50th (ft)		253	82				205	259			171	0
Queue Length 95th (ft)		367	170				#403	398			#323	60
Internal Link Dist (ft)		908			451			153			258	
Turn Bay Length (ft)			50									
Base Capacity (vph)		528	503				399	674			275	331
Starvation Cap Reductn		0	0				0	0			0	0
Spillback Cap Reductn		0	0				0	0			0	0
Storage Cap Reductn		0	0				0	0			0	0
Reduced v/c Ratio		0.68	0.50				0.89	0.65			0.83	0.44

**Intersection Summary**

Area Type: CBD

Cycle Length: 123

Actuated Cycle Length: 117

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 43.6

Intersection LOS: D

Intersection Capacity Utilization 68.0%





ICU Level of Service C

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 46: Bennington Street/State Road &amp; Winthrop Avenue /Winthrop Avenue

 Ø2	 Ø6	 Ø4	 Ø3
31 s	25 s	41 s	26 s

Lane Group	Ø3
------------	----

LOS
-----

Approach Delay
----------------

Approach LOS
--------------

Queue Length 50th (ft)
------------------------

Queue Length 95th (ft)
------------------------

Internal Link Dist (ft)
-------------------------

Turn Bay Length (ft)
----------------------

Base Capacity (vph)
---------------------

Starvation Cap Reductn
------------------------

Spillback Cap Reductn
-----------------------

Storage Cap Reductn
---------------------

Reduced v/c Ratio
-------------------

Intersection Summary
----------------------

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗				↖	↗			↖	↗
Traffic Volume (vph)	75	250	230	0	0	0	335	335	80	35	170	130
Future Volume (vph)	75	250	230	0	0	0	335	335	80	35	170	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	10	12	12	12	10	11	12	12	12	12
Total Lost time (s)		4.0	4.0				6.0	6.0			3.0	5.0
Lane Util. Factor		1.00	1.00				1.00	1.00			1.00	1.00
Frpb, ped/bikes		1.00	1.00				1.00	1.00			1.00	0.99
Flpb, ped/bikes		1.00	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.85				1.00	0.97			1.00	0.85
Flt Protected		0.99	1.00				0.95	1.00			0.99	1.00
Satd. Flow (prot)		1665	1319				1501	1599			1668	1236
Flt Permitted		0.99	1.00				0.30	1.00			0.87	1.00
Satd. Flow (perm)		1665	1319				478	1599			1458	1236
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.94	0.94	0.94	0.90	0.90	0.90
Adj. Flow (vph)	82	275	253	0	0	0	356	356	85	39	189	144
RTOR Reduction (vph)	0	0	91	0	0	0	0	7	0	0	0	119
Lane Group Flow (vph)	0	357	162	0	0	0	356	434	0	0	228	25
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	0%	2%	2%	2%	2%	2%	1%	0%	0%	0%	2%	3%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	2
Parking (#/hr)									1			1
Turn Type	Split	NA	Prot				D.P+P	NA		Perm	NA	Perm
Protected Phases	4	4	4				2	2 6			6	
Permitted Phases							6			6		6
Actuated Green, G (s)		29.0	29.0				43.8	50.8			20.1	20.1
Effective Green, g (s)		31.0	31.0				45.8	51.8			22.1	20.1
Actuated g/C Ratio		0.27	0.27				0.39	0.44			0.19	0.17
Clearance Time (s)		6.0	6.0				7.0				5.0	5.0
Vehicle Extension (s)		3.0	3.0				3.0				3.0	3.0
Lane Grp Cap (vph)		441	349				403	708			275	212
v/s Ratio Prot		c0.21	0.12				c0.19	0.27				
v/s Ratio Perm							c0.16				0.16	0.02
v/c Ratio		0.81	0.46				0.88	0.61			0.83	0.12
Uniform Delay, d1		40.2	36.0				29.1	24.9			45.6	40.9
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		10.5	1.0				19.8	1.6			24.2	1.1
Delay (s)		50.7	37.0				49.0	26.5			69.7	42.0
Level of Service		D	D				D	C			E	D
Approach Delay (s)		45.0			0.0			36.5			59.0	
Approach LOS		D			A			D			E	

## Intersection Summary

HCM 2000 Control Delay	44.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	116.9	Sum of lost time (s)	19.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

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 106: Route 145/Winthrop Avenue & Revere Beach Pkwy

2017 Existing Conditions  
 Timing Plan: Evening Peak Hou

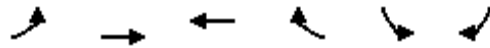


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1000	620	570	25	0	465
Future Volume (vph)	1000	620	570	25	0	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	2			0	0	3
Taper Length (ft)	25				25	
Satd. Flow (prot)	3433	1863	3515	0	0	3610
Flt Permitted	0.950					
Satd. Flow (perm)	3422	1863	3515	0	0	3610
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			5			346
Link Speed (mph)		30	30		30	
Link Distance (ft)		635	988		1471	
Travel Time (s)		14.4	22.5		33.4	
Confl. Peds. (#/hr)	13			13	1	
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1087	674	647	0	0	505
Turn Type	Split	NA	NA			Over
Protected Phases	1	1	2			1
Permitted Phases						
Detector Phase	1	1	2			1
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0			10.0
Minimum Split (s)	15.0	15.0	14.5			15.0
Total Split (s)	55.0	55.0	49.5			55.0
Total Split (%)	52.6%	52.6%	47.4%			52.6%
Yellow Time (s)	4.0	4.0	3.5			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0
Total Lost Time (s)	5.0	5.0	4.5			5.0
Lead/Lag	Lead	Lead	Lag			Lead
Lead-Lag Optimize?						
Recall Mode	Min	Min	None			Min
Act Effect Green (s)	50.2	50.2	21.7			50.2
Actuated g/C Ratio	0.62	0.62	0.27			0.62
v/c Ratio	0.51	0.59	0.69			0.21
Control Delay	10.5	12.9	30.5			2.7
Queue Delay	0.0	0.3	0.0			0.0
Total Delay	10.5	13.2	30.5			2.7

13796.00 :: Suffolk Downs Redevelopment  
 106: Route 145/Winthrop Avenue & Revere Beach Pkwy

2017 Existing Conditions

Timing Plan: Evening Peak Hou



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS	B	B	C			A
Approach Delay		11.5	30.5		2.7	
Approach LOS		B	C		A	
Queue Length 50th (ft)	141	182	153			12
Queue Length 95th (ft)	238	351	208			34
Internal Link Dist (ft)		555	908		1391	
Turn Bay Length (ft)						
Base Capacity (vph)	2115	1148	1951			2357
Starvation Cap Reductn	0	101	0			0
Spillback Cap Reductn	0	0	0			0
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	0.51	0.64	0.33			0.21

Intersection Summary

Area Type: Other

Cycle Length: 104.5

Actuated Cycle Length: 81.4

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 14.2

Intersection LOS: B

Intersection Capacity Utilization 53.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 106: Route 145/Winthrop Avenue & Revere Beach Pkwy

 Ø1	 Ø2
55 s	49.5 s

13796.00 :: Suffolk Downs Redevelopment  
 106: Route 145/Winthrop Avenue & Revere Beach Pkwy

2017 Existing Conditions  
 Timing Plan: Evening Peak Hou



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1000	620	570	25	0	465
Future Volume (vph)	1000	620	570	25	0	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.5			5.0
Lane Util. Factor	0.97	1.00	0.95			0.76
Frpb, ped/bikes	1.00	1.00	1.00			1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00
Frt	1.00	1.00	0.99			0.85
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	1863	3513			3610
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	1863	3513			3610
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1087	674	620	27	0	505
RTOR Reduction (vph)	0	0	4	0	0	133
Lane Group Flow (vph)	1087	674	643	0	0	372
Confl. Peds. (#/hr)	13			13	1	
Turn Type	Split	NA	NA			Over
Protected Phases	1	1	2			1
Permitted Phases						
Actuated Green, G (s)	50.2	50.2	21.7			50.2
Effective Green, g (s)	50.2	50.2	21.7			50.2
Actuated g/C Ratio	0.62	0.62	0.27			0.62
Clearance Time (s)	5.0	5.0	4.5			5.0
Vehicle Extension (s)	7.0	7.0	4.0			7.0
Lane Grp Cap (vph)	2117	1148	936			2226
v/s Ratio Prot	0.32	c0.36	c0.18			0.10
v/s Ratio Perm						
v/c Ratio	0.51	0.59	0.69			0.17
Uniform Delay, d1	8.8	9.4	26.8			6.7
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.7	1.8	2.3			0.1
Delay (s)	9.4	11.1	29.1			6.8
Level of Service	A	B	C			A
Approach Delay (s)		10.1	29.1		6.8	
Approach LOS		B	C		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay			13.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.62			
Actuated Cycle Length (s)			81.4		Sum of lost time (s)	9.5
Intersection Capacity Utilization			53.1%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

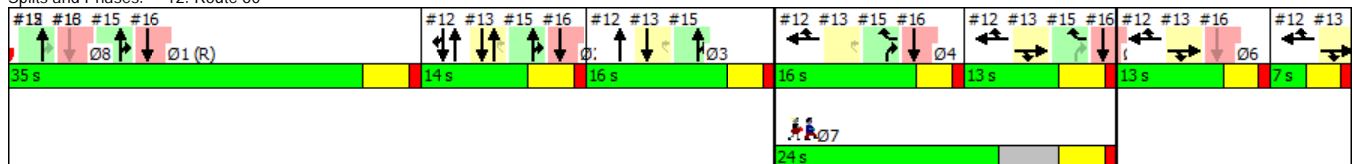


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø2	Ø3	Ø4
Lane Configurations					↕↕	↕		↕↕			↕↕	↕				
Traffic Volume (vph)	0	0	0	0	1160	345	0	895	0	0	760	285				
Future Volume (vph)	0	0	0	0	1160	345	0	895	0	0	760	285				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Satd. Flow (prot)	0	0	0	0	3539	1583	0	3438	0	0	3374	1583				
Flt Permitted																
Satd. Flow (perm)	0	0	0	0	3539	1583	0	3438	0	0	3374	1583				
Right Turn on Red			Yes			Yes			Yes			Yes				
Satd. Flow (RTOR)						105						297				
Link Speed (mph)		30			30			30			30					
Link Distance (ft)		244			245			403			338					
Travel Time (s)		5.5			5.6			9.2			7.7					
Confl. Peds. (#/hr)						21										
Confl. Bikes (#/hr)						1										
Peak Hour Factor	0.92	0.92	0.92	0.92	0.96	0.96	0.92	0.91	0.92	0.92	0.96	0.96				
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	7%	2%				
Shared Lane Traffic (%)																
Lane Group Flow (vph)	0	0	0	0	1208	359	0	984	0	0	792	297				
Turn Type					NA	Prot		NA			NA	Prot				
Protected Phases					4 5 6 8	4 5 6 8		1 2 3			1 2	1 2	1	2	3	4
Permitted Phases																
Minimum Split (s)													10.0	19.0	16.0	16.0
Total Split (s)													35.0	14.0	16.0	16.0
Total Split (%)													31%	12%	14%	14%
Yellow Time (s)													4.0	4.0	3.0	3.0
All-Red Time (s)													1.0	1.0	1.0	1.0
Lost Time Adjust (s)																
Total Lost Time (s)																
Lead/Lag													Lead	Lag		Lead
Lead-Lag Optimize?																
Act Effct Green (s)					45.0	45.0		60.0			44.0	44.0				
Actuated g/C Ratio					0.39	0.39		0.53			0.39	0.39				
v/c Ratio					0.87	0.52		0.54			0.61	0.37				
Control Delay					43.4	24.6		1.0			30.5	4.1				
Queue Delay					49.0	14.6		0.2			0.0	0.0				
Total Delay					92.4	39.3		1.2			30.5	4.1				
LOS					F	D		A			C	A				
Approach Delay					80.2			1.2			23.3					
Approach LOS					F			A			C					
Queue Length 50th (ft)					465	146		2			242	0				
Queue Length 95th (ft)					554	m188		2			308	54				
Internal Link Dist (ft)		164			165			323			258					
Turn Bay Length (ft)																
Base Capacity (vph)					1396	688		1809			1302	793				
Starvation Cap Reductn					586	309		204			0	0				
Spillback Cap Reductn					0	0		0			0	0				
Storage Cap Reductn					0	0		0			0	0				
Reduced v/c Ratio					1.49	0.95		0.61			0.61	0.37				


















#### Intersection Summary

Area Type:	Other
Cycle Length: 114	
Actuated Cycle Length: 114	
Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green	
Natural Cycle: 130	
Control Type: Pretimed	
Maximum v/c Ratio: 1.41	
Intersection Signal Delay: 41.8	Intersection LOS: D
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

#### Splits and Phases: 12: Route 60



Lane Group	Ø5	Ø6	Ø7	Ø8
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	5	6	7	8
Permitted Phases				
Minimum Split (s)	13.0	13.0	24.0	9.0
Total Split (s)	13.0	13.0	24.0	7.0
Total Split (%)	11%	11%	21%	6%
Yellow Time (s)	4.0	3.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead		Lag
Lead-Lag Optimize?				
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				
Intersection Summary				

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1160	345	0	895	0	0	760	285
Future Volume (vph)	0	0	0	0	1160	345	0	895	0	0	760	285
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		5.0			5.0	5.0
Lane Util. Factor					0.95	1.00		0.95			0.95	1.00
Frbp, ped/bikes					1.00	1.00		1.00			1.00	1.00
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					3539	1583		3438			3374	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					3539	1583		3438			3374	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.96	0.96	0.92	0.91	0.92	0.92	0.96	0.96
Adj. Flow (vph)	0	0	0	0	1208	359	0	984	0	0	792	297
RTOR Reduction (vph)	0	0	0	0	0	68	0	0	0	0	0	182
Lane Group Flow (vph)	0	0	0	0	1208	291	0	984	0	0	792	115
Confl. Peds. (#/hr)					21							
Confl. Bikes (#/hr)					1							
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	7%	2%
Turn Type					NA	Prot		NA			NA	Prot
Protected Phases					4 5 6 8	4 5 6 8		1 2 3			1 2	1 2
Permitted Phases												
Actuated Green, G (s)					45.0	45.0		61.0			44.0	44.0
Effective Green, g (s)					40.0	40.0		61.0			44.0	44.0
Actuated g/C Ratio					0.35	0.35		0.54			0.39	0.39
Clearance Time (s)												
Lane Grp Cap (vph)					1241	555		1839			1302	610
v/s Ratio Prot					c0.34	0.18		c0.29			c0.23	0.07
v/s Ratio Perm												
v/c Ratio					0.97	0.52		0.54			0.61	0.19
Uniform Delay, d1					36.5	29.4		17.3			28.1	23.2
Progression Factor					1.17	1.22		0.01			1.00	1.00
Incremental Delay, d2					16.6	2.6		0.8			2.1	0.7
Delay (s)					59.4	38.6		0.9			30.2	23.9
Level of Service					E	D		A			C	C
Approach Delay (s)		0.0			54.7			0.9			28.5	
Approach LOS		A			D			A			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			32.3		HCM 2000 Level of Service						C	
HCM 2000 Volume to Capacity ratio			0.89									
Actuated Cycle Length (s)			114.0		Sum of lost time (s)						31.0	
Intersection Capacity Utilization			64.3%		ICU Level of Service						C	
Analysis Period (min)			15									

c Critical Lane Group

	→	↘	↑	↗	↓	↖							
Lane Group	EBT	EBR2	NBT	NBR	SBT	NWR2	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations	↑↑	↗↗	↑↑	↗	↑↑	↗↗							
Traffic Volume (vph)	505	860	895	460	760	1060							
Future Volume (vph)	505	860	895	460	760	1060							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900							
Storage Length (ft)				100									
Storage Lanes				1									
Taper Length (ft)													
Satd. Flow (prot)	3471	2787	3438	1568	3406	2814							
Flt Permitted													
Satd. Flow (perm)	3471	2787	3438	1568	3406	2814							
Right Turn on Red		Yes				Yes							
Satd. Flow (RTOR)		567				144							
Link Speed (mph)	30		30		30								
Link Distance (ft)	272		380		403								
Travel Time (s)	6.2		8.6		9.2								
Confl. Peds. (#/hr)		2											
Peak Hour Factor	0.96	0.96	0.92	0.79	0.93	0.91							
Heavy Vehicles (%)	4%	2%	5%	3%	6%	1%							
Shared Lane Traffic (%)													
Lane Group Flow (vph)	526	896	973	582	817	1165							
Turn Type	NA	Prot	NA	custom	NA	Perm							
Protected Phases	5 6 8	5 6 8	1 2	1	1 2 3		2	3	4	5	6	7	8
Permitted Phases						2 3 4							
Minimum Split (s)				10.0			19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)				35.0			14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)				30.7%			12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)				4.0			4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)				1.0			1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)				0.0									
Total Lost Time (s)				5.0									
Lead/Lag				Lead			Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?													
Act Effct Green (s)	28.0	28.0	44.0	30.0	60.0	41.0							
Actuated g/C Ratio	0.25	0.25	0.39	0.26	0.53	0.36							
v/c Ratio	0.62	0.81	0.73	1.41	0.46	1.06							
Control Delay	29.5	11.6	34.0	233.0	1.1	74.7							
Queue Delay	5.8	1.2	0.0	0.0	0.1	0.0							
Total Delay	35.3	12.8	34.0	233.0	1.2	74.7							
LOS	D	B	C	F	A	E							
Approach Delay	21.1		108.5		1.2								
Approach LOS	C		F		A								
Queue Length 50th (ft)	118	28	317	~574	4	~491							
Queue Length 95th (ft)	192	76	396	#657	5	#640							
Internal Link Dist (ft)	192		300		323								
Turn Bay Length (ft)				100									
Base Capacity (vph)	852	1112	1326	412	1792	1104							
Starvation Cap Reductn	264	75	0	0	203	0							
Spillback Cap Reductn	0	0	0	0	0	0							
Storage Cap Reductn	0	0	0	0	0	0							
Reduced v/c Ratio	0.89	0.86	0.73	1.41	0.51	1.06							

#### Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 130

Control Type: Pretimed

Maximum v/c Ratio: 1.41

Intersection Signal Delay: 57.8

Intersection LOS: E

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

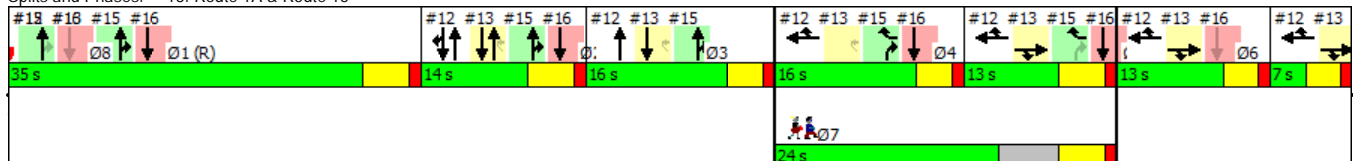
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 13: Route 1A & Route 16



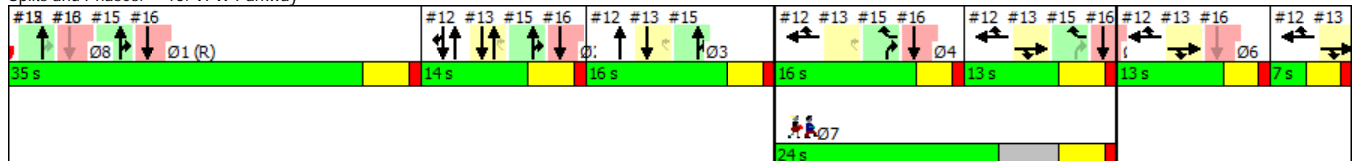
	→	↘	↑	↗	↓	↖
Movement	EBT	EBR2	NBT	NBR	SBT	NWR2
Lane Configurations	↑↑	↑↑	↑↑	↑	↑↑	↑↑
Traffic Volume (vph)	505	860	895	460	760	1060
Future Volume (vph)	505	860	895	460	760	1060
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.95	0.88	0.95	1.00	0.95	0.88
Frbp, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)	3471	2787	3438	1568	3406	2814
Flt Permitted	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (perm)	3471	2787	3438	1568	3406	2814
Peak-hour factor, PHF	0.96	0.96	0.92	0.79	0.93	0.91
Adj. Flow (vph)	526	896	973	582	817	1165
RTOR Reduction (vph)	0	443	0	0	0	96
Lane Group Flow (vph)	526	453	973	582	817	1069
Confl. Peds. (#/hr)	2					
Heavy Vehicles (%)	4%	2%	5%	3%	6%	1%
Turn Type	NA	Prot	NA	custom	NA	Perm
Protected Phases	5 6 8	5 6 8	1 2	1	1 2 3	
Permitted Phases						2 3 4
Actuated Green, G (s)	29.0	29.0	44.0	30.0	61.0	42.0
Effective Green, g (s)	25.0	25.0	44.0	30.0	61.0	38.0
Actuated g/C Ratio	0.22	0.22	0.39	0.26	0.54	0.33
Clearance Time (s)	5.0					
Lane Grp Cap (vph)	761	611	1326	412	1822	938
v/s Ratio Prot	0.15	c0.16	0.28	c0.37	0.24	
v/s Ratio Perm						c0.38
v/c Ratio	0.69	0.74	0.73	1.41	0.45	1.14
Uniform Delay, d1	40.9	41.5	30.0	42.0	16.2	38.0
Progression Factor	0.68	0.39	1.00	1.00	0.02	1.00
Incremental Delay, d2	4.9	7.6	3.6	199.6	0.6	75.8
Delay (s)	32.8	23.6	33.6	241.6	1.0	113.8
Level of Service	C	C	C	F	A	F
Approach Delay (s)	27.0		111.5		1.0	
Approach LOS	C		F		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay			69.6		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.25			
Actuated Cycle Length (s)			114.0		Sum of lost time (s)	31.0
Intersection Capacity Utilization			Err%		ICU Level of Service	H
Analysis Period (min)			15			
c Critical Lane Group						





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations		↗↘	↗↘	↗↘										
Traffic Volume (vph)	0	1035	425	1600	0	0								
Future Volume (vph)	0	1035	425	1600	0	0								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Satd. Flow (prot)	0	2787	3539	2787	0	0								
Flt Permitted														
Satd. Flow (perm)	0	2787	3539	2787	0	0								
Right Turn on Red		Yes		Yes										
Satd. Flow (RTOR)		864		1839										
Link Speed (mph)	30		30		30									
Link Distance (ft)	507		317		245									
Travel Time (s)	11.5		7.2		5.6									
Confl. Peds. (#/hr)		11												
Peak Hour Factor	0.92	0.95	0.91	0.87	0.92	0.92								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	1089	467	1839	0	0								
Turn Type		custom	NA	custom										
Protected Phases		4 5	1 2 3 8	1 2 3 4			1	2	3	4	5	6	7	8
Permitted Phases				5 8										
Minimum Split (s)							10.0	19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)							35.0	14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)							31%	12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)							4.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)														
Total Lost Time (s)														
Lead/Lag							Lead	Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?														
Act Effect Green (s)		25.0	67.0	96.0										
Actuated g/C Ratio		0.22	0.59	0.84										
v/c Ratio		0.85	0.22	0.70										
Control Delay		15.9	13.4	0.9										
Queue Delay		48.4	1.1	3.6										
Total Delay		64.3	14.5	4.5										
LOS		E	B	A										
Approach Delay	64.3		6.5											
Approach LOS	E		A											
Queue Length 50th (ft)		87	92	0										
Queue Length 95th (ft)		196	m91	m11										
Internal Link Dist (ft)	427		237		165									
Turn Bay Length (ft)														
Base Capacity (vph)		1285	2079	2637										
Starvation Cap Reductn		0	1335	691										
Spillback Cap Reductn		357	918	0										
Storage Cap Reductn		0	0	0										
Reduced v/c Ratio		1.17	0.63	0.95										

#### Intersection Summary




Area Type: Other  
 Cycle Length: 114  
 Actuated Cycle Length: 114  
 Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green  
 Natural Cycle: 130  
 Control Type: Pretimed  
 Maximum v/c Ratio: 1.41  
 Intersection Signal Delay: 25.1 Intersection LOS: C  
 Intersection Capacity Utilization 60.1% ICU Level of Service B  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

#### Splits and Phases: 15: VFW Parkway



						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	1035	425	1600	0	0
Future Volume (vph)	0	1035	425	1600	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.0	5.0		
Lane Util. Factor		0.88	0.95	0.88		
Flpb, ped/bikes		1.00	1.00	1.00		
Flpb, ped/bikes		1.00	1.00	1.00		
Frt		0.85	1.00	0.85		
Flt Protected		1.00	1.00	1.00		
Satd. Flow (prot)		2787	3539	2787		
Flt Permitted		1.00	1.00	1.00		
Satd. Flow (perm)		2787	3539	2787		
Peak-hour factor, PHF	0.92	0.95	0.91	0.87	0.92	0.92
Adj. Flow (vph)	0	1089	467	1839	0	0
RTOR Reduction (vph)	0	682	0	484	0	0
Lane Group Flow (vph)	0	407	467	1355	0	0
Confl. Peds. (#/hr)		11				
Turn Type		custom	NA	custom		
Protected Phases		4 5	1 2 3 8	1 2 3 4		
Permitted Phases				5 8		
Actuated Green, G (s)		24.0	68.0	88.0		
Effective Green, g (s)		24.0	64.0	84.0		
Actuated g/C Ratio		0.21	0.56	0.74		
Clearance Time (s)						
Lane Grp Cap (vph)		586	1986	2053		
v/s Ratio Prot		c0.15	0.13	c0.42		
v/s Ratio Perm				0.06		
v/c Ratio		0.69	0.24	0.66		
Uniform Delay, d1		41.6	12.6	7.7		
Progression Factor		1.00	1.19	7.90		
Incremental Delay, d2		6.7	0.0	0.2		
Delay (s)		48.3	15.0	60.9		
Level of Service		D	B	E		
Approach Delay (s)	48.3		51.6		0.0	
Approach LOS	D		D		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		50.5		HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio		0.71				
Actuated Cycle Length (s)		114.0		Sum of lost time (s)	31.0	
Intersection Capacity Utilization		60.1%		ICU Level of Service	B	
Analysis Period (min)		15				

c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations														
Traffic Volume (vph)	0	360	0	0	1005	440								
Future Volume (vph)	0	360	0	0	1005	440								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Satd. Flow (prot)	0	1580	0	0	3539	1583								
Flt Permitted														
Satd. Flow (perm)	0	1547	0	0	3539	1538								
Right Turn on Red		Yes				Yes								
Satd. Flow (RTOR)		324				289								
Link Speed (mph)	30			30	30									
Link Distance (ft)	572			272	244									
Travel Time (s)	13.0			6.2	5.5									
Confl. Peds. (#/hr)		31				17								
Peak Hour Factor	0.92	0.88	0.92	0.92	0.97	0.97								
Heavy Vehicles (%)	2%	4%	2%	2%	2%	2%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	409	0	0	1036	454								
Turn Type		Free			NA	Free								
Protected Phases					1 2 4 5		1	2	3	4	5	6	7	8
Permitted Phases		Free			6 8	Free								
Minimum Split (s)							10.0	19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)							35.0	14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)							31%	12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)							4.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)														
Total Lost Time (s)														
Lead/Lag							Lead	Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?														
Act Effect Green (s)		114.0			93.0	114.0								
Actuated g/C Ratio		1.00			0.82	1.00								
v/c Ratio		0.26			0.36	0.30								
Control Delay		0.4			0.6	0.3								
Queue Delay		0.0			0.7	0.0								
Total Delay		0.4			1.3	0.3								
LOS		A			A	A								
Approach Delay	0.4				1.0									
Approach LOS	A				A									
Queue Length 50th (ft)		0			12	0								
Queue Length 95th (ft)		0			m11	m0								
Internal Link Dist (ft)	492			192	164									
Turn Bay Length (ft)														
Base Capacity (vph)		1547			2887	1538								
Starvation Cap Reductn		0			1369	0								
Spillback Cap Reductn		19			45	0								
Storage Cap Reductn		0			0	0								
Reduced v/c Ratio		0.27			0.68	0.30								

#### Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 130

Control Type: Pretimed

Maximum v/c Ratio: 1.41

Intersection Signal Delay: 0.8

Intersection LOS: A

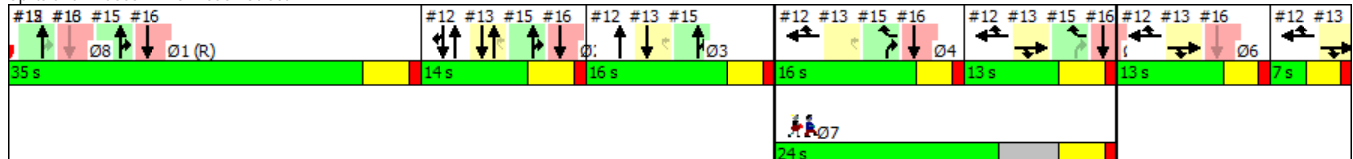
Intersection Capacity Utilization 45.1%

ICU Level of Service A











Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: Beach Street














						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					 	
Traffic Volume (vph)	0	360	0	0	1005	440
Future Volume (vph)	0	360	0	0	1005	440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			5.0	4.0
Lane Util. Factor		1.00			0.95	1.00
Frpb, ped/bikes		0.98			1.00	0.97
Flpb, ped/bikes		1.00			1.00	1.00
Frt		0.86			1.00	0.85
Flt Protected		1.00			1.00	1.00
Satd. Flow (prot)		1547			3539	1538
Flt Permitted		1.00			1.00	1.00
Satd. Flow (perm)		1547			3539	1538
Peak-hour factor, PHF	0.92	0.88	0.92	0.92	0.97	0.97
Adj. Flow (vph)	0	409	0	0	1036	454
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	409	0	0	1036	454
Confl. Peds. (#/hr)		31				17
Heavy Vehicles (%)	2%	4%	2%	2%	2%	2%
Turn Type		Free			NA	Free
Protected Phases					1 2 4 5	
Permitted Phases		Free			6 8	Free
Actuated Green, G (s)		114.0			84.0	114.0
Effective Green, g (s)		114.0			76.0	114.0
Actuated g/C Ratio		1.00			0.67	1.00
Clearance Time (s)						
Lane Grp Cap (vph)		1547			2514	1538
v/s Ratio Prot					c0.23	
v/s Ratio Perm		0.26			0.06	c0.30
v/c Ratio		0.26			0.41	0.30
Uniform Delay, d1		0.0			8.7	0.0
Progression Factor		1.00			0.14	1.00
Incremental Delay, d2		0.4			0.3	0.3
Delay (s)		0.4			1.5	0.3
Level of Service		A			A	A
Approach Delay (s)	0.4			0.0	1.1	
Approach LOS	A			A	A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		1.0			HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio		0.47				
Actuated Cycle Length (s)		114.0			Sum of lost time (s)	31.0
Intersection Capacity Utilization		45.1%			ICU Level of Service	A
Analysis Period (min)		15				
c Critical Lane Group						

13796.00 :: Suffolk Downs Redevelopment  
7: Route 1A & Waldemar Avenue










2017 Existing Conditions  
Timing Plan: Evening Peak Hou

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	100	2440	100	0	1630
Future Volume (vph)	0	100	2440	100	0	1630
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1808	3475	0	0	3438
Flt Permitted						
Satd. Flow (perm)	0	1808	3475	0	0	3438
Link Speed (mph)	30		30			30
Link Distance (ft)	1034		925			475
Travel Time (s)	23.5		21.0			10.8
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.83	0.83	0.95	0.95	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	3%	10%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	120	2673	0	0	1663
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	83.5%			ICU Level of Service E		
Analysis Period (min)	15					

13796.00 :: Suffolk Downs Redevelopment  
7: Route 1A & Waldemar Avenue

2017 Existing Conditions














Timing Plan: Evening Peak Hou

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	100	2440	100	0	1630
Future Volume (Veh/h)	0	100	2440	100	0	1630
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.83	0.83	0.95	0.95	0.98	0.98
Hourly flow rate (vph)	0	120	2568	105	0	1663
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			925			880
pX, platoon unblocked	0.55	0.35			0.35	
vC, conflicting volume	3452	1336			2673	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	559	0			2073	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	69			100	
cM capacity (veh/h)	257	381			96	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	120	1712	961	832	832	
Volume Left	0	0	0	0	0	
Volume Right	120	0	105	0	0	
cSH	381	1700	1700	1700	1700	
Volume to Capacity	0.31	1.01	0.57	0.49	0.49	
Queue Length 95th (ft)	33	0	0	0	0	
Control Delay (s)	18.7	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	18.7	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			83.5%	ICU Level of Service		E
Analysis Period (min)			15			

13796.00 :: Suffolk Downs Redevelopment  
8: Route 1A & Tomasello Dr

2017 Existing Conditions

Timing Plan: Evening Peak Hou

								
Lane Group	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	5	5	20	2215	305	15	5	1605
Future Volume (vph)	5	5	20	2215	305	15	5	1605
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	11	11	12	11	11
Grade (%)	0%			0%				0%
Storage Length (ft)	0	0	0		0		150	
Storage Lanes	1	1	0		0		1	
Taper Length (ft)	25		25				25	
Satd. Flow (prot)	1925	1723	0	3307	0	0	1745	3355
Flt Permitted	0.950						0.950	
Satd. Flow (perm)	1925	1723	0	3307	0	0	1745	3355
Link Speed (mph)	30			30				30
Link Distance (ft)	5227			475				405
Travel Time (s)	118.8			10.8				9.2
Confl. Peds. (#/hr)					2		2	
Confl. Bikes (#/hr)								
Peak Hour Factor	0.70	0.70	0.99	0.99	0.99	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	4%	1%	0%	0%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%			0%				0%
Shared Lane Traffic (%)								
Lane Group Flow (vph)	7	7	0	2565	0	0	21	1689
Sign Control	Stop			Free				Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized
















Intersection Capacity Utilization 95.2% ICU Level of Service F

Analysis Period (min) 15

13796.00 :: Suffolk Downs Redevelopment  
8: Route 1A & Tomasello Dr

2017 Existing Conditions










Timing Plan: Evening Peak Hou

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations				 				 
Traffic Volume (veh/h)	5	5	20	2215	305	15	5	1605
Future Volume (Veh/h)	5	5	20	2215	305	15	5	1605
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.70	0.70	0.99	0.99	0.99	0.95	0.95	0.95
Hourly flow rate (vph)	7	7	0	2237	308	0	5	1689
Pedestrians	2							
Lane Width (ft)	14.0							
Walking Speed (ft/s)	4.0							
Percent Blockage	0							
Right turn flare (veh)								
Median type				None				None
Median storage (veh)								
Upstream signal (ft)								405
pX, platoon unblocked	0.61		0.00			0.00		
vC, conflicting volume	3248	1274	0			0	2547	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	3407	1274	0			0	2547	
tC, single (s)	6.8	6.9	0.0			0.0	4.1	
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0			0.0	2.2	
p0 queue free %	0	96	0			0	97	
cM capacity (veh/h)	3	160	0			0	177	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3	
Volume Total	7	7	1491	1054	5	844	844	
Volume Left	7	0	0	0	5	0	0	
Volume Right	0	7	0	308	0	0	0	
cSH	3	160	1700	1700	177	1700	1700	
Volume to Capacity	2.10	0.04	0.88	0.62	0.03	0.50	0.50	
Queue Length 95th (ft)	47	3	0	0	2	0	0	
Control Delay (s)	2368.8	28.5	0.0	0.0	25.9	0.0	0.0	
Lane LOS	F	D			D			
Approach Delay (s)	1198.6		0.0		0.1			
Approach LOS	F							
Intersection Summary								
Average Delay			4.0					
Intersection Capacity Utilization			95.2%		ICU Level of Service		F	
Analysis Period (min)			15					

13796.00 :: Suffolk Downs Redevelopment  
10: Route 1A & Furlong St










2017 Existing Conditions

Timing Plan: Evening Peak Hou

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	105	2210	130	0	1760
Future Volume (vph)	0	105	2210	130	0	1760
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	11	11	11	11
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1757	3299	0	0	3323
Flt Permitted						
Satd. Flow (perm)	0	1757	3299	0	0	3323
Link Speed (mph)	30		30			30
Link Distance (ft)	911		2394			546
Travel Time (s)	20.7		54.4			12.4
Confl. Peds. (#/hr)	1					
Confl. Bikes (#/hr)						
Peak Hour Factor	0.83	0.83	0.96	0.96	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	6%	5%	4%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	127	2437	0	0	1892
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	78.4%			ICU Level of Service D		
Analysis Period (min)	15					






13796.00 :: Suffolk Downs Redevelopment  
10: Route 1A & Furlong St

2017 Existing Conditions  
Timing Plan: Evening Peak Hou

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	105	2210	130	0	1760
Future Volume (Veh/h)	0	105	2210	130	0	1760
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.83	0.83	0.96	0.96	0.93	0.93
Hourly flow rate (vph)	0	127	2302	135	0	1892
Pedestrians			1			
Lane Width (ft)			11.0			
Walking Speed (ft/s)			4.0			
Percent Blockage			0			
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3316	1218			2437	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3316	1218			2437	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.4			2.2	
p0 queue free %	100	24			100	
cM capacity (veh/h)	7	167			196	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	127	1535	902	946	946	
Volume Left	0	0	0	0	0	
Volume Right	127	0	135	0	0	
cSH	167	1700	1700	1700	1700	
Volume to Capacity	0.76	0.90	0.53	0.56	0.56	
Queue Length 95th (ft)	121	0	0	0	0	
Control Delay (s)	74.4	0.0	0.0	0.0	0.0	
Lane LOS	F					
Approach Delay (s)	74.4	0.0		0.0		
Approach LOS	F					
Intersection Summary						
Average Delay			2.1			
Intersection Capacity Utilization			78.4%		ICU Level of Service	D
Analysis Period (min)			15			

13796.00 :: Suffolk Downs Redevelopment  
45: Bennington Street & Crescent Ave

2017 Existing Conditions  
Timing Plan: Evening Peak Hou

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	50	120	630	0	0	400
Future Volume (vph)	50	120	630	0	0	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1615	1445	3610	0	0	3353
Flt Permitted	0.950					
Satd. Flow (perm)	1615	1445	3610	0	0	3353
Link Speed (mph)	30		30			30
Link Distance (ft)	817		1471			233
Travel Time (s)	18.6		33.4			5.3
Confl. Peds. (#/hr)	1	8				
Confl. Bikes (#/hr)						
Peak Hour Factor	0.85	0.85	0.94	0.94	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	1	1		1		1
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	141	670	0	0	455
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized











Intersection Capacity Utilization 33.5% ICU Level of Service A

Analysis Period (min) 15



13796.00 :: Suffolk Downs Redevelopment  
45: Bennington Street & Crescent Ave

2017 Existing Conditions  
Timing Plan: Evening Peak Hou

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	50	120	630	0	0	400
Future Volume (Veh/h)	50	120	630	0	0	400
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.94	0.94	0.88	0.88
Hourly flow rate (vph)	59	141	670	0	0	455
Pedestrians			1			8
Lane Width (ft)			12.0			12.0
Walking Speed (ft/s)			4.0			4.0
Percent Blockage			0			1
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						233
pX, platoon unblocked						
vC, conflicting volume	898	343			670	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	898	343			670	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	79	78			100	
cM capacity (veh/h)	282	654			930	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	59	141	335	335	228	228
Volume Left	59	0	0	0	0	0
Volume Right	0	141	0	0	0	0
cSH	282	654	1700	1700	1700	1700
Volume to Capacity	0.21	0.22	0.20	0.20	0.13	0.13
Queue Length 95th (ft)	19	20	0	0	0	0
Control Delay (s)	21.1	12.0	0.0	0.0	0.0	0.0
Lane LOS	C	B				
Approach Delay (s)	14.7		0.0		0.0	
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			2.2			
Intersection Capacity Utilization			33.5%		ICU Level of Service	A
Analysis Period (min)			15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	15	120	465	60	135	50	90	1090	170	125	2365
Future Volume (vph)	45	15	120	465	60	135	50	90	1090	170	125	2365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	12	12	10	10	12	11	11	11	11	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	130		0	0		250		400		500	380	0
Storage Lanes	1		0	0		1		1		1	1	0
Taper Length (ft)	25			25				25			25	
Satd. Flow (prot)	1504	1473	0	0	1641	1436	0	1519	3172	1446	1544	3292
Flt Permitted	0.154				0.390			0.950			0.950	
Satd. Flow (perm)	244	1473	0	0	668	1436	0	1519	3172	1446	1544	3292
Right Turn on Red			Yes			No				Yes		Yes
Satd. Flow (RTOR)		107								185		1
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		537			1355			733			925	
Travel Time (s)		12.2			30.8			16.7			21.0	
Confl. Peds. (#/hr)	22					22						
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	12%	0%	9%	4%	0%	5%	2%	22%	10%	8%	13%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	8
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	146	0	0	570	147	0	152	1185	185	136	2604
Turn Type	Perm	NA		Perm	NA	pt+ov	Prot	Prot	NA	Prot	Prot	NA
Protected Phases		8			4	4 5	1	1	6	6	5	2
Permitted Phases	8			4								
Detector Phase	8	8		4	4	4 5	1	1	6	6	5	2
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		6.0	6.0	20.0	20.0	6.0	20.0
Minimum Split (s)	26.0	26.0		12.0	12.0		12.0	12.0	27.0	27.0	13.5	31.0
Total Split (s)	31.0	31.0		18.0	18.0		31.0	31.0	137.0	137.0	32.5	137.0
Total Split (%)	15.5%	15.5%		9.0%	9.0%		15.5%	15.5%	68.3%	68.3%	16.2%	68.3%
Yellow Time (s)	3.0	3.0		4.0	4.0		4.0	4.0	5.0	5.0	5.5	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	5.0	5.0			6.0			5.0	6.0	6.0	6.5	6.0
Lead/Lag							Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	None	Min	Min	None	Min
Act Effct Green (s)	26.0	26.0			25.0	53.1		23.3	131.2	131.2	21.6	131.0
Actuated g/C Ratio	0.13	0.13			0.13	0.27		0.12	0.67	0.67	0.11	0.67
v/c Ratio	1.53	0.51			6.79	0.38		0.84	0.56	0.18	0.80	1.19
Control Delay	406.1	30.5			2623.3	61.1		120.3	18.9	1.8	117.4	119.2
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	406.1	30.5			2623.3	61.1		120.3	18.9	1.8	117.4	119.2
LOS	F	C			F	E		F	B	A	F	F
Approach Delay		124.9			2098.0				26.9			119.1
Approach LOS		F			F				C			F
Queue Length 50th (ft)	~90	46			~1430	158		196	417	0	176	~2171
Queue Length 95th (ft)	#195	131			#1682	230		#311	500	31	260	#2261
Internal Link Dist (ft)		457			1275				653			845
Turn Bay Length (ft)	130					250		400		500	380	
Base Capacity (vph)	32	288			84	420		201	2129	1031	204	2222
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0
Storage Cap Reductn	0	0			0	0		0	0	0	0	0
Reduced v/c Ratio	1.53	0.51			6.79	0.35		0.76	0.56	0.18	0.67	1.17

## Intersection Summary

Area Type: Other

Cycle Length: 200.5

Actuated Cycle Length: 196.3

Natural Cycle: 140

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 6.79

Intersection Signal Delay: 366.5

Intersection LOS: F

Intersection Capacity Utilization 129.5%

ICU Level of Service H

Analysis Period (min) 15

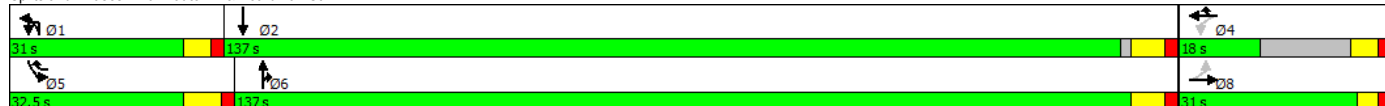
- Volume exceeds capacity, queue is theoretically infinite.























Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Route 1A &amp; Boardman St



													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (vph)	45	15	120	465	60	135	50	90	1090	170	125	2365	30
Future Volume (vph)	45	15	120	465	60	135	50	90	1090	170	125	2365	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	12	12	10	10	12	11	11	11	11	11	12
Total Lost time (s)	5.0	5.0			6.0	6.0		5.0	6.0	6.0	6.5	6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.87			1.00	0.85		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00			0.96	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1504	1473			1640	1436		1519	3172	1446	1544	3292	
Flt Permitted	0.15	1.00			0.39	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	244	1473			667	1436		1519	3172	1446	1544	3292	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	16	130	505	65	147	54	98	1185	185	136	2571	33
RTOR Reduction (vph)	0	93	0	0	0	0	0	0	0	61	0	0	0
Lane Group Flow (vph)	49	53	0	0	570	147	0	152	1185	124	136	2604	0
Confl. Peds. (#/hr)	22				22								
Heavy Vehicles (%)	12%	0%	9%	4%	0%	5%	2%	22%	10%	8%	13%	4%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	8	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases	8				4	4 5	1	1	6	6	5	2	
Permitted Phases	8			4									
Actuated Green, G (s)	26.0	26.0			25.0	51.6		22.3	130.2	130.2	20.6	130.0	
Effective Green, g (s)	26.0	26.0			25.0	51.6		23.3	131.2	131.2	21.6	131.0	
Actuated g/C Ratio	0.13	0.13			0.13	0.26		0.12	0.67	0.67	0.11	0.67	
Clearance Time (s)	5.0	5.0			6.0			6.0	7.0	7.0	7.5	7.0	
Vehicle Extension (s)	2.0	2.0			2.0			2.0	4.0	4.0	2.0	4.0	
Lane Grp Cap (vph)	32	195			84	377		180	2120	966	169	2196	
v/s Ratio Prot		0.04				0.10		c0.10	0.37	0.09	0.09	c0.79	
v/s Ratio Perm	0.20				c0.85								
v/c Ratio	1.53	0.27			6.79	0.39		0.84	0.56	0.13	0.80	1.19	
Uniform Delay, d1	85.2	76.6			85.7	59.4		84.7	17.2	11.8	85.3	32.7	
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	0.99	
Incremental Delay, d2	349.9	0.3			2628.5	0.2		27.7	0.4	0.1	22.4	88.5	
Delay (s)	435.0	76.9			2714.1	59.7		112.4	17.6	11.9	107.7	120.9	
Level of Service	F	E			F	E		F	B	B	F	F	
Approach Delay (s)		166.9			2169.9				26.4			120.2	
Approach LOS		F			F				C			F	
Intersection Summary													
HCM 2000 Control Delay		378.4				HCM 2000 Level of Service		F					
HCM 2000 Volume to Capacity ratio		1.94											
Actuated Cycle Length (s)		196.3				Sum of lost time (s)		19.5					
Intersection Capacity Utilization		129.5%				ICU Level of Service		H					
Analysis Period (min)		15											

c Critical Lane Group

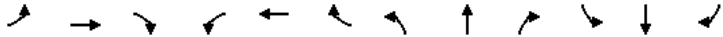
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔						↔			↔	
Traffic Volume (vph)	55	15	5	0	0	0	0	1235	5	0	2355	0
Future Volume (vph)	55	15	5	0	0	0	0	1235	5	0	2355	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	12	12	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1522	0	0	0	0	0	3220	0	0	3323	0
Flt Permitted		0.964										
Satd. Flow (perm)	0	1522	0	0	0	0	0	3220	0	0	3323	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		122			363			405			225	
Travel Time (s)		2.8			8.3			9.2			5.1	
Confl. Peds. (#/hr)			1	1					2	2		
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	20%	93%	33%	2%	2%	2%	0%	8%	80%	0%	5%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	81	0	0	0	0	0	1347	0	0	2560	0
Turn Type	Perm	NA						NA			NA	
Protected Phases		2						1			1	
Permitted Phases	2											
Detector Phase	2	2						1			1	
Switch Phase												
Minimum Initial (s)	10.0	10.0						20.0			20.0	
Minimum Split (s)	16.0	16.0						27.0			27.0	
Total Split (s)	36.0	36.0						55.0			55.0	
Total Split (%)	39.6%	39.6%						60.4%			60.4%	
Yellow Time (s)	4.0	4.0						5.0			5.0	
All-Red Time (s)	2.0	2.0						2.0			2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.0						7.0			7.0	
Lead/Lag	Lag	Lag						Lead			Lead	
Lead-Lag Optimize?												
Recall Mode	None	None						Max			Max	
Act Effct Green (s)		11.0						52.5			52.5	
Actuated g/C Ratio		0.15						0.73			0.73	
v/c Ratio		0.35						0.57			1.05	
Control Delay		31.4						7.5			50.3	
Queue Delay		0.0						0.0			0.0	
Total Delay		31.4						7.5			50.3	
LOS		C						A			D	
Approach Delay		31.4						7.5			50.3	
Approach LOS		C						A			D	
Queue Length 50th (ft)		32						143			~704	
Queue Length 95th (ft)		71						235			#906	
Internal Link Dist (ft)		42			283			325			145	
Turn Bay Length (ft)												
Base Capacity (vph)		636						2356			2431	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.13						0.57			1.05	

#### Intersection Summary

Area Type:	Other
Cycle Length:	91
Actuated Cycle Length:	71.8
Natural Cycle:	90
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	1.05
Intersection Signal Delay:	35.5
Intersection Capacity Utilization:	84.3%
Analysis Period (min):	15
Intersection LOS:	D
ICU Level of Service:	E
-	Volume exceeds capacity, queue is theoretically infinite.
	Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer.
	Queue shown is maximum after two cycles.

Splits and Phases: 9: Route 1A & Jughandle



												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔						↔			↔	
Traffic Volume (vph)	55	15	5	0	0	0	0	1235	5	0	2355	0
Future Volume (vph)	55	15	5	0	0	0	0	1235	5	0	2355	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	16	16	16	12	12	12	11	11	11	11	11	11
Total Lost time (s)		6.0						7.0			7.0	
Lane Util. Factor		1.00						0.95			0.95	
Frpb, ped/bikes		1.00						1.00			1.00	
Flpb, ped/bikes		1.00						1.00			1.00	
Frt		0.99						1.00			1.00	
Flt Protected		0.96						1.00			1.00	
Satd. Flow (prot)		1521						3221			3323	
Flt Permitted		0.96						1.00			1.00	
Satd. Flow (perm)		1521						3221			3323	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	16	5	0	0	0	0	1342	5	0	2560	0
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	80	0	0	0	0	0	1347	0	0	2560	0
Confl. Peds. (#/hr)			1	1					2	2		
Heavy Vehicles (%)	20%	93%	33%	2%	2%	2%	0%	8%	80%	0%	5%	0%
Turn Type	Perm	NA						NA			NA	
Protected Phases		2						1			1	
Permitted Phases	2											
Actuated Green, G (s)		8.9						51.1			51.1	
Effective Green, g (s)		8.9						51.1			51.1	
Actuated g/C Ratio		0.12						0.70			0.70	
Clearance Time (s)		6.0						7.0			7.0	
Vehicle Extension (s)		4.0						4.0			4.0	
Lane Grp Cap (vph)		185						2254			2326	
v/s Ratio Prot								0.42			c0.77	
v/s Ratio Perm		0.05										
v/c Ratio		0.43						0.60			1.10	
Uniform Delay, d1		29.7						5.6			10.9	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		2.2						1.2			52.6	
Delay (s)		31.9						6.8			63.5	
Level of Service		C						A			E	
Approach Delay (s)		31.9			0.0			6.8			63.5	
Approach LOS		C			A			A			E	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			43.7									D
HCM 2000 Volume to Capacity ratio			1.00									
Actuated Cycle Length (s)			73.0						13.0			
Intersection Capacity Utilization			84.3%									E
Analysis Period (min)			15									
c Critical Lane Group												

	→	↘	↶	↙	←	↗	↘
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↓	↑↑↑		
Traffic Volume (vph)	1095	260	30	295	1460	0	0
Future Volume (vph)	1095	260	30	295	1460	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	9	11	12	12
Grade (%)	0%				0%	0%	
Storage Length (ft)		500		130		0	0
Storage Lanes		0		1		0	0
Taper Length (ft)				25		25	
Satd. Flow (prot)	4676	0	0	1590	4855	0	0
Flt Permitted				0.950			
Satd. Flow (perm)	4676	0	0	1587	4855	0	0
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	180						
Link Speed (mph)	30				30	30	
Link Distance (ft)	572				1857	345	
Travel Time (s)	13.0				42.2	7.8	
Confl. Peds. (#/hr)		7	2	7			
Confl. Bikes (#/hr)							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	6%	4%	2%	3%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	2	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%				0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1473	0	0	354	1587	0	0
Turn Type	NA		Prot	Prot	NA		
Protected Phases	2		1	1	1 2		
Permitted Phases							
Detector Phase	2		1	1	1 2		
Switch Phase							
Minimum Initial (s)	8.0		8.0	8.0			
Minimum Split (s)	13.0		13.0	13.0			
Total Split (s)	24.0		17.0	17.0			
Total Split (%)	58.5%		41.5%	41.5%			
Yellow Time (s)	3.5			3.5			
All-Red Time (s)	1.5		1.5	1.5			
Lost Time Adjust (s)	0.0			0.0			
Total Lost Time (s)	5.0			5.0			
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?							
Recall Mode	Min		None	None			
Act Effct Green (s)	19.0			12.0	41.0		
Actuated g/C Ratio	0.46			0.29	1.00		
v/c Ratio	0.65			0.76	0.33		
Control Delay	9.0			27.7	0.2		
Queue Delay	0.0			0.0	0.0		
Total Delay	9.0			27.7	0.2		
LOS	A			C	A		
Approach Delay	9.0				5.2		
Approach LOS	A				A		
Queue Length 50th (ft)	72			73	0		
Queue Length 95th (ft)	109			#179	0		
Internal Link Dist (ft)	492				1777	265	
Turn Bay Length (ft)				130			
Base Capacity (vph)	2263			465	4855		
Starvation Cap Reductn	0			0	0		
Spillback Cap Reductn	0			0	0		
Storage Cap Reductn	0			0	0		
Reduced v/c Ratio	0.65			0.76	0.33		

#### Intersection Summary

Area Type: Other  
 Cycle Length: 41  
 Actuated Cycle Length: 41  
 Natural Cycle: 40  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.76  
 Intersection Signal Delay: 6.8  
 Intersection LOS: A  
 Intersection Capacity Utilization 53.4%  
 ICU Level of Service A  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 11: Route 1A on-ramp & Route 145



	→	↘	↶	↙	←	↗	↘
Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↓	↑↑↑		
Traffic Volume (vph)	1095	260	30	295	1460	0	0
Future Volume (vph)	1095	260	30	295	1460	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	9	11	12	12
Total Lost time (s)	5.0			5.0	5.0		
Lane Util. Factor	0.91			1.00	0.91		
Frpb, ped/bikes	0.99			1.00	1.00		
Flpb, ped/bikes	1.00			1.00	1.00		
Frt	0.97			1.00	1.00		
Flt Protected	1.00			0.95	1.00		
Satd. Flow (prot)	4677			1590	4855		
Flt Permitted	1.00			0.95	1.00		
Satd. Flow (perm)	4677			1590	4855		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1190	283	33	321	1587	0	0
RTOR Reduction (vph)	97	0	0	0	0	0	0
Lane Group Flow (vph)	1376	0	0	354	1587	0	0
Confl. Peds. (#/hr)		7	2	7			
Heavy Vehicles (%)	3%	6%	4%	2%	3%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	2	0	0
Turn Type	NA		Prot	Prot	NA		
Protected Phases	2		1	1	1 2		
Permitted Phases							
Actuated Green, G (s)	19.0			12.0	41.0		
Effective Green, g (s)	19.0			12.0	41.0		
Actuated g/C Ratio	0.46			0.29	1.00		
Clearance Time (s)	5.0			5.0			
Vehicle Extension (s)	2.0			2.0			
Lane Grp Cap (vph)	2167			465	4855		
v/s Ratio Prot	c0.29			c0.22	0.33		
v/s Ratio Perm							
v/c Ratio	0.64			0.76	0.33		
Uniform Delay, d1	8.4			13.2	0.0		
Progression Factor	1.00			1.00	1.00		
Incremental Delay, d2	0.5			6.5	0.0		
Delay (s)	8.8			19.7	0.0		
Level of Service	A			B	A		
Approach Delay (s)	8.8				3.6	0.0	
Approach LOS	A				A	A	
<b>Intersection Summary</b>							
HCM 2000 Control Delay			5.9		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.68				
Actuated Cycle Length (s)			41.0		Sum of lost time (s)		10.0
Intersection Capacity Utilization			53.4%		ICU Level of Service		A
Analysis Period (min)			15				

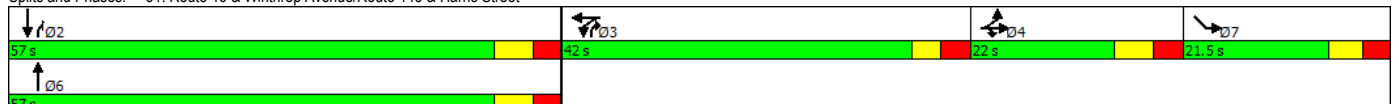
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SEL	SER
Lane Configurations		↕↕	↕	↕↕	↕			↕↕	↕	↕↕		↕↕	
Traffic Volume (vph)	25	275	25	945	360	65	90	455	875	430	5	205	20
Future Volume (vph)	25	275	25	945	360	65	90	455	875	430	5	205	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	16	12	12	12	12	12	14	16	12	12	12
Grade (%)		0%			0%			0%		0%		0%	
Storage Length (ft)	50		0	0		0			0		0	0	0
Storage Lanes	1		1	2		0			1		0	1	0
Taper Length (ft)	25			25								25	
Satd. Flow (prot)	0	3266	1746	3400	1744	0	0	3471	1656	3889	0	1742	0
Flt Permitted		0.996		0.950								0.956	
Satd. Flow (perm)	0	3265	1746	3364	1744	0	0	3471	1656	3889	0	1742	0
Right Turn on Red			Yes				No		Yes				
Satd. Flow (RTOR)			126						80				
Link Speed (mph)		30			30			30		30		30	
Link Distance (ft)		485			572			480		673		302	
Travel Time (s)		11.0			13.0			10.9		15.3		6.9	
Confl. Peds. (#/hr)	4		5	5			4				3		5
Confl. Bikes (#/hr)						1	1						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	4%	3%	4%	3%	1%	4%	4%	5%	0%	3%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)													1
Mid-Block Traffic (%)		0%			0%			0%		0%		0%	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	326		1027	560	0	0	495	951	472	0	245	0
Turn Type	Split	NA	Prot	Split	NA			NA	custom	NA		Prot	
Protected Phases	4	4	4	3	3			6	2 3	2		7	
Permitted Phases													
Detector Phase	4	4	4	3	3			6	2 3	2		7	
Switch Phase													
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0			8.0		8.0		8.0	
Minimum Split (s)	20.0	20.0	20.0	28.0	28.0			15.0		20.0		20.0	
Total Split (s)	22.0	22.0	22.0	42.0	42.0			57.0		57.0		21.5	
Total Split (%)	15.4%	15.4%	15.4%	29.5%	29.5%			40.0%		40.0%		15.1%	
Yellow Time (s)	4.0	4.0	4.0	3.0	3.0			4.0		4.0		3.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0			3.0		3.0		3.0	
Lost Time Adjust (s)		-1.0	-1.0	-1.0	-1.0			-1.0		-1.0		-1.0	
Total Lost Time (s)		6.0	6.0	5.0	5.0			6.0		6.0		5.5	
Lead/Lag	Lag	Lag	Lag	Lead	Lead								
Lead-Lag Optimize?													
Recall Mode	None	None	None	None	None			Min		Min		None	
Act Effct Green (s)	16.0	16.0	16.0	37.0	37.0			50.4	92.4	50.4		16.0	
Actuated g/C Ratio	0.11	0.11	0.11	0.26	0.26			0.36	0.65	0.36		0.11	
v/c Ratio	0.89	0.09	1.16	1.23	1.23			0.40	0.86	0.34		1.25	
Control Delay	87.5	0.6	130.2	166.5	166.5			35.6	27.6	34.4		197.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0		0.0	
Total Delay	87.5	0.6	130.2	166.5	166.5			35.6	27.6	34.4		197.6	
LOS	F	A	F	F	F			D	C	C		F	
Approach Delay	80.8			143.0				30.3		34.4		197.6	
Approach LOS	F			F				C		C		F	
Queue Length 50th (ft)	159	0	~580	~642				180	611	167		~283	
Queue Length 95th (ft)	#247	0	#715	#873				231	871	215		#460	
Internal Link Dist (ft)	405			492				400		593		222	
Turn Bay Length (ft)													
Base Capacity (vph)	368	308	886	454				1247	1099	1397		196	
Starvation Cap Reductn	0	0	0	0				0	0	0		0	
Spillback Cap Reductn	0	0	0	0				0	0	0		0	
Storage Cap Reductn	0	0	0	0				0	0	0		0	
Reduced v/c Ratio	0.89	0.09	1.16	1.23				0.40	0.87	0.34		1.25	

#### Intersection Summary

Area Type: Other  
 Cycle Length: 142.5  
 Actuated Cycle Length: 141.9  
 Natural Cycle: 110  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.25  
 Intersection Signal Delay: 88.7  
 Intersection LOS: F  
 Intersection Capacity Utilization 81.2%  
 ICU Level of Service D  
 Analysis Period (min) 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

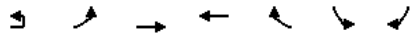
Splits and Phases: 31: Route 16 & Winthrop Avenue/Route 145 & Harris Street





	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SEL	SER
Movement													
Lane Configurations		↕↕	↕	↕↕	↕			↕↕	↕	↕↕		↕↕	
Traffic Volume (vph)	25	275	25	945	360	65	90	455	875	430	5	205	20
Future Volume (vph)	25	275	25	945	360	65	90	455	875	430	5	205	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	16	12	12	12	12	12	14	16	12	12	12
Total Lost time (s)		6.0	6.0	5.0	5.0			6.0	6.0	6.0		5.5	
Lane Util. Factor		0.95	1.00	0.97	1.00			0.95	1.00	0.95		1.00	
Frpb, ped/bikes		1.00	1.00	1.00	0.99			1.00	1.00	1.00		1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00	
Frt		1.00	0.85	1.00	0.95			1.00	0.85	1.00		0.99	
Flt Protected		1.00	1.00	0.95	1.00			1.00	1.00	1.00		0.96	
Satd. Flow (prot)		3266	1746	3400	1744			3471	1656	3891		1743	
Flt Permitted		1.00	1.00	0.95	1.00			1.00	1.00	1.00		0.96	
Satd. Flow (perm)		3266	1746	3400	1744			3471	1656	3891		1743	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	299	27	1027	391	71	98	495	951	467	5	223	22
RTOR Reduction (vph)	0	0	24	0	0	0	0	0	27	0	0	0	0
Lane Group Flow (vph)	0	326	3	1027	560	0	0	495	924	472	0	245	0
Confl. Peds. (#/hr)	4		5	5				4			3		5
Confl. Bikes (#/hr)						1	1						
Heavy Vehicles (%)	0%	3%	4%	3%	4%	3%	1%	4%	4%	5%	0%	3%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)													1
Turn Type	Split	NA	Prot	Split	NA			NA	custom	NA		Prot	
Protected Phases	4	4	4	3	3			6	2 3	2		7	
Permitted Phases													
Actuated Green, G (s)		15.0	15.0	36.0	36.0			49.4	92.4	49.4		15.0	
Effective Green, g (s)		16.0	16.0	37.0	37.0			50.4	93.4	50.4		16.0	
Actuated g/C Ratio		0.11	0.11	0.26	0.26			0.36	0.66	0.36		0.11	
Clearance Time (s)		7.0	7.0	6.0	6.0			7.0		7.0		6.5	
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0		3.0		3.0	
Lane Grp Cap (vph)		368	196	886	454			1232	1089	1382		196	
v/s Ratio Prot		c0.10	0.00	0.30	c0.32			0.14	c0.56	0.12		c0.14	
v/s Ratio Perm													
v/c Ratio		0.89	0.02	1.16	1.23			0.40	0.85	0.34		1.25	
Uniform Delay, d1		62.1	56.0	52.5	52.5			34.4	18.8	33.6		63.0	
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00	
Incremental Delay, d2		21.6	0.0	84.2	123.0			0.2	6.3	0.1		147.5	
Delay (s)		83.6	56.0	136.6	175.4			34.6	25.1	33.7		210.5	
Level of Service		F	E	F	F			C	C	C		F	
Approach Delay (s)		81.5			150.3			28.3		33.7		210.5	
Approach LOS		F			F			C		C		F	
Intersection Summary													
HCM 2000 Control Delay			91.6		HCM 2000 Level of Service					F			
HCM 2000 Volume to Capacity ratio			1.05										
Actuated Cycle Length (s)			141.9		Sum of lost time (s)					22.5			
Intersection Capacity Utilization			81.2%		ICU Level of Service					D			
Analysis Period (min)			15										

c Critical Lane Group



Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø3	Ø9
Lane Configurations										
Traffic Volume (vph)	5	290	960	1190	90	130	290			
Future Volume (vph)	5	290	960	1190	90	130	290			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900			
Lane Width (ft)	12	11	11	11	12	15	12			
Grade (%)			0%	0%		0%				
Storage Length (ft)		120			0	0	150			
Storage Lanes		1			0	1	1			
Taper Length (ft)		25				25				
Satd. Flow (prot)	0	1686	4855	4804	0	1947	1583			
Flt Permitted		0.950				0.950				
Satd. Flow (perm)	0	1686	4855	4804	0	1947	1583			
Right Turn on Red					Yes		Yes			
Satd. Flow (RTOR)				16			315			
Link Speed (mph)			30	30		30				
Link Distance (ft)			1857	236		865				
Travel Time (s)			42.2	5.4		19.7				
Confl. Peds. (#/hr)										
Confl. Bikes (#/hr)				1						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	100%	100%	100%	100%	100%	100%	100%			
Heavy Vehicles (%)	33%	3%	3%	3%	4%	2%	2%			
Bus Blockages (#/hr)	0	0	2	0	0	0	0			
Parking (#/hr)										
Mid-Block Traffic (%)			0%	0%		0%				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	320	1043	1391	0	141	315			
Turn Type	Prot	Prot	NA	NA		Prot	Prot			
Protected Phases	5	5	2 3 5	2 3		7	7	2	3	9
Permitted Phases										
Detector Phase	5	5	2 3 5	2 3		7	7			
Switch Phase										
Minimum Initial (s)	1.0	1.0				4.0	4.0	20.0	8.0	4.0
Minimum Split (s)	20.0	20.0				8.0	8.0	26.0	13.0	22.0
Total Split (s)	20.0	20.0				9.0	9.0	26.0	13.0	22.0
Total Split (%)	22.2%	22.2%				10.0%	10.0%	29%	14%	24%
Yellow Time (s)	3.0	3.0				3.5	3.5	4.0	4.0	3.5
All-Red Time (s)	1.0	1.0				0.5	0.5	2.0	1.0	0.5
Lost Time Adjust (s)		-1.0				-1.0	-1.0			
Total Lost Time (s)		3.0				3.0	3.0			
Lead/Lag	Lag	Lag				Lead	Lead	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes				Yes	Yes			
Recall Mode	None	None				None	None	Min	None	None
Act Effct Green (s)		17.2	55.7	35.4		6.1	6.1			
Actuated g/C Ratio		0.24	0.77	0.49		0.08	0.08			
v/c Ratio		0.80	0.28	0.59		0.87	0.75			
Control Delay		44.7	3.7	16.8		80.1	17.5			
Queue Delay		0.0	0.0	0.9		58.7	0.0			
Total Delay		44.7	3.7	17.7		138.8	17.5			
LOS		D	A	B		F	B			
Approach Delay			13.3	17.7		55.0				
Approach LOS			B	B		D				
Queue Length 50th (ft)		123	23	161		59	0			
Queue Length 95th (ft)		#354	123	324		#208	#117			
Internal Link Dist (ft)			1777	156		785				
Turn Bay Length (ft)		120					150			
Base Capacity (vph)		400	3734	2360		163	421			
Starvation Cap Reductn		0	0	626		0	0			
Spillback Cap Reductn		0	8	0		46	0			
Storage Cap Reductn		0	0	0		0	0			
Reduced v/c Ratio		0.80	0.28	0.80		1.21	0.75			

#### Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 72.4

Natural Cycle: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 21.1

Intersection LOS: C

Intersection Capacity Utilization 69.3%

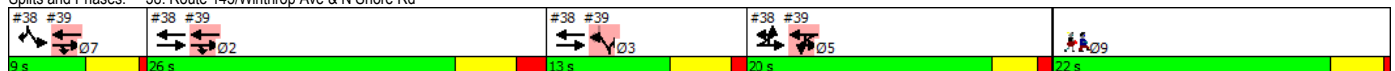
ICU Level of Service C

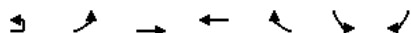
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 38: Route 145/Winthrop Ave & N Shore Rd





Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔↔↔	↔↔↔		↔	↔
Traffic Volume (vph)	5	290	960	1190	90	130	290
Future Volume (vph)	5	290	960	1190	90	130	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	11	12	15	12
Total Lost time (s)		3.0	4.0	4.0		3.0	3.0
Lane Util. Factor		1.00	0.91	0.91		1.00	1.00
Frpb, ped/bikes		1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00
Frt		1.00	1.00	0.99		1.00	0.85
Flt Protected		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)		1686	4855	4806		1947	1583
Flt Permitted		0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)		1686	4855	4806		1947	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	315	1043	1293	98	141	315
RTOR Reduction (vph)	0	0	0	8	0	0	290
Lane Group Flow (vph)	0	320	1043	1383	0	141	25
Confl. Bikes (#/hr)					1		
Heavy Vehicles (%)	33%	3%	3%	3%	4%	2%	2%
Bus Blockages (#/hr)	0	0	2	0	0	0	0
Turn Type	Prot	Prot	NA	NA		Prot	Prot
Protected Phases	5	5	2 3 5	2 3		7	7
Permitted Phases							
Actuated Green, G (s)		16.2	55.6	34.4		5.1	5.1
Effective Green, g (s)		17.2	54.6	36.4		6.1	6.1
Actuated g/C Ratio		0.23	0.72	0.48		0.08	0.08
Clearance Time (s)		4.0				4.0	4.0
Vehicle Extension (s)		3.0				3.0	3.0
Lane Grp Cap (vph)		383	3506	2314		157	127
v/s Ratio Prot		c0.19	0.21	c0.29		c0.07	0.02
v/s Ratio Perm							
v/c Ratio		0.84	0.30	0.60		0.90	0.20
Uniform Delay, d1		27.9	3.7	14.3		34.4	32.5
Progression Factor		1.00	1.00	1.08		1.00	1.00
Incremental Delay, d2		14.5	0.1	0.5		43.0	0.8
Delay (s)		42.4	3.8	15.9		77.4	33.2
Level of Service		D	A	B		E	C
Approach Delay (s)			12.8	15.9		46.9	
Approach LOS			B	B		D	
<b>Intersection Summary</b>							
HCM 2000 Control Delay			19.0		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.72				
Actuated Cycle Length (s)			75.6		Sum of lost time (s)		18.0
Intersection Capacity Utilization			69.3%		ICU Level of Service		C
Analysis Period (min)			15				

c Critical Lane Group














Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø2	Ø7	Ø9
Lane Configurations		↑↑	↑		↓	↓↓↓		↓↓		↑			↑			
Traffic Volume (vph)	0	955	135	5	195	1225	0	50	0	45	0	0	5			
Future Volume (vph)	0	955	135	5	195	1225	0	50	0	45	0	0	5			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Lane Width (ft)	12	11	11	12	9	11	12	10	12	12	12	12	16			
Grade (%)		0%				0%			0%			0%				
Storage Length (ft)	0		0		100		0	0		100	0		0			
Storage Lanes	0		1		1		0	1		1	0		1			
Taper Length (ft)	25				25			25			25					
Satd. Flow (prot)	0	3388	1501	0	1593	4903	0	2944	0	1615	0	0	1826			
Flt Permitted					0.950			0.950								
Satd. Flow (perm)	0	3388	1501	0	1593	4903	0	2944	0	1615	0	0	1826			
Right Turn on Red			No				Yes			No			No			
Satd. Flow (RTOR)																
Link Speed (mph)		30				30			30			30				
Link Distance (ft)		236				635			1415			589				
Travel Time (s)		5.4				14.4			32.2			13.4				
Confl. Peds. (#/hr)																
Confl. Bikes (#/hr)							1									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Heavy Vehicles (%)	0%	3%	4%	0%	2%	2%	0%	11%	0%	0%	2%	2%	2%			
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0	0			
Parking (#/hr)																
Mid-Block Traffic (%)		0%				0%			0%			0%				
Shared Lane Traffic (%)																
Lane Group Flow (vph)	0	1038	147	0	217	1332	0	54	0	49	0	0	5			
Turn Type		NA	Prot	Prot	Prot	NA		Prot		Prot			Perm			
Protected Phases		2 7	2 7	5	5	2 5 7		3		3				2	7	9
Permitted Phases													3			
Detector Phase		2 7	2 7	5	5	2 5 7		3		3			3			
Switch Phase																
Minimum Initial (s)				1.0	1.0			8.0		8.0			8.0	20.0	4.0	4.0
Minimum Split (s)				20.0	20.0			13.0		13.0			13.0	26.0	8.0	22.0
Total Split (s)				20.0	20.0			13.0		13.0			13.0	26.0	9.0	22.0
Total Split (%)				22.2%	22.2%			14.4%		14.4%			14.4%	29%	10%	24%
Yellow Time (s)				3.0	3.0			4.0		4.0			4.0	4.0	3.5	3.5
All-Red Time (s)				1.0	1.0			1.0		1.0			1.0	2.0	0.5	0.5
Lost Time Adjust (s)					-1.0			-1.0		-1.0			-1.0			
Total Lost Time (s)					3.0			4.0		4.0			4.0			
Lead/Lag				Lag	Lag			Lead		Lead			Lead	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes									Yes	Yes	
Recall Mode				None	None			None		None			None	Min	None	None
Act Effct Green (s)		31.4	29.4		17.2	51.0		9.1		9.1			9.1			
Actuated g/C Ratio		0.43	0.41		0.24	0.70		0.13		0.13			0.13			
v/c Ratio		0.71	0.24		0.57	0.39		0.15		0.24			0.02			
Control Delay		17.4	13.9		33.6	4.5		31.8		34.6			32.0			
Queue Delay		2.1	0.6		0.0	0.1		0.0		0.0			0.0			
Total Delay		19.5	14.5		33.6	4.5		31.8		34.6			32.0			
LOS		B	B		C	A		C		C			C			
Approach Delay		18.9				8.6		33.1				32.0				
Approach LOS		B				A		C				C				
Queue Length 50th (ft)		128	33		79	51		10		19			2			
Queue Length 95th (ft)		m#408	m59		#218	114		32		62			13			
Internal Link Dist (ft)		156				555		1335				509				
Turn Bay Length (ft)					100					100						
Base Capacity (vph)		1468	609		378	3454		370		203			229			
Starvation Cap Reductn		281	220		0	0		0		0			0			
Spillback Cap Reductn		0	0		0	505		0		0			0			
Storage Cap Reductn		0	0		0	0		0		0			0			
Reduced v/c Ratio		0.87	0.38		0.57	0.45		0.15		0.24			0.02			

#### Intersection Summary












Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 72.4	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 13.8	Intersection LOS: B
Intersection Capacity Utilization 54.1%	ICU Level of Service A
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

#### Splits and Phases: 39: Tomasello Dr/Shaws Driveway & Winthrop Ave/Route 145

#38 #39 Ø7	#38 #39 Ø2	#38 #39 Ø3	#38 #39 Ø5	#38 #39 Ø9
9 s	26 s	13 s	20 s	22 s

													
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↓	↑↑↑		↓		↑			↑
Traffic Volume (vph)	0	955	135	5	195	1225	0	50	0	45	0	0	5
Future Volume (vph)	0	955	135	5	195	1225	0	50	0	45	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	12	9	11	12	10	12	12	12	12	16
Total Lost time (s)		4.0	6.0		3.0	4.0		4.0		4.0			4.0
Lane Util. Factor		0.95	1.00		1.00	0.91		0.97		1.00			1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00			1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00			1.00
Frt		1.00	0.85		1.00	1.00		1.00		0.85			0.86
Flt Protected		1.00	1.00		0.95	1.00		0.95		1.00			1.00
Satd. Flow (prot)		3388	1501		1593	4903		2944		1615			1826
Flt Permitted		1.00	1.00		0.95	1.00		0.95		1.00			1.00
Satd. Flow (perm)		3388	1501		1593	4903		2944		1615			1826
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1038	147	5	212	1332	0	54	0	49	0	0	5
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1038	147	0	217	1332	0	54	0	49	0	0	5
Confl. Bikes (#/hr)							1						
Heavy Vehicles (%)	0%	3%	4%	0%	2%	2%	0%	11%	0%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0	0
Turn Type	NA	Prot	Prot	Prot	NA		Prot		Prot			Perm	
Protected Phases	2 7	2 7	5	5	2 5 7		3		3				
Permitted Phases													3
Actuated Green, G (s)		29.4	29.4		16.2	45.6		8.1		8.1			8.1
Effective Green, g (s)		29.4	25.4		17.2	47.6		9.1		9.1			9.1
Actuated g/C Ratio		0.39	0.34		0.23	0.63		0.12		0.12			0.12
Clearance Time (s)					4.0			5.0		5.0			5.0
Vehicle Extension (s)					3.0			4.0		4.0			4.0
Lane Grp Cap (vph)		1317	504		362	3087		354		194			219
v/s Ratio Prot		c0.31	0.10		c0.14	0.27		0.02		c0.03			
v/s Ratio Perm													0.00
v/c Ratio		0.79	0.29		0.60	0.43		0.15		0.25			0.02
Uniform Delay, d1		20.4	18.5		26.1	7.1		29.8		30.2			29.3
Progression Factor		0.76	0.79		1.00	1.00		1.00		1.00			1.00
Incremental Delay, d2		3.2	0.4		2.7	0.1		0.3		0.9			0.1
Delay (s)		18.6	14.9		28.8	7.3		30.1		31.1			29.4
Level of Service		B	B		C	A		C		C			C
Approach Delay (s)		18.2				10.3		30.6				29.4	
Approach LOS		B				B		C				C	
<b>Intersection Summary</b>													
HCM 2000 Control Delay			14.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.67										
Actuated Cycle Length (s)			75.6			Sum of lost time (s)		22.0					
Intersection Capacity Utilization			54.1%			ICU Level of Service		A					
Analysis Period (min)			15										

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø2
Lane Configurations													
Traffic Volume (vph)	40	155	20	405	285	155	25	120	240	150	550	100	
Future Volume (vph)	40	155	20	405	285	155	25	120	240	150	550	100	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	10	16	12	10	12	12	10	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		150	250		305	0		0	0		0	
Storage Lanes	0		0	1		0	0		1	1		0	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1371	0	1498	1459	1540	0	1436	1193	1504	1513	0	
Flt Permitted		0.850		0.950	0.991			0.249		0.541			
Satd. Flow (perm)	0	1176	0	1498	1459	1540	0	361	1193	857	1513	0	
Right Turn on Red			Yes			Yes			No			Yes	
Satd. Flow (RTOR)		3				139					6		
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		1166			677			476			1736		
Travel Time (s)		26.5			15.4			10.8			39.5		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	7%	9%	15%	3%	3%	7%	11%	10%	9%	8%	2%	9%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)	1	1	1						1			1	
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)				16%									
Lane Group Flow (vph)	0	233	0	370	380	168	0	157	261	163	707	0	
Turn Type	Perm	NA		Split	NA	Prot	Perm	NA	pt+ov	D.P+P	NA		
Protected Phases		5		1	1	1		7	1 7	6	6 7		2
Permitted Phases	5						7			7			
Detector Phase	5	5		1	1	1	7	7	1 7	6	6 7		
Switch Phase													
Minimum Initial (s)	8.0	8.0		8.0	8.0	8.0	8.0	8.0		4.0			1.0
Minimum Split (s)	37.0	37.0		30.0	30.0	30.0	13.0	13.0		8.0			26.0
Total Split (s)	40.0	40.0		40.0	40.0	40.0	30.0	30.0		20.0			30.0
Total Split (%)	25.0%	25.0%		25.0%	25.0%	25.0%	18.8%	18.8%		12.5%			19%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0			3.0
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	2.0	2.0		1.0			1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		0.0		0.0			
Total Lost Time (s)		6.0		6.0	6.0	6.0		5.0		4.0			
Lead/Lag	Lead	Lead		Lead	Lead	Lead				Lag			Lag
Lead-Lag Optimize?													
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None			None
Act Effct Green (s)		34.0		34.0	34.0	34.0		39.4	78.4	56.4	60.4		
Actuated g/C Ratio		0.21		0.21	0.21	0.21		0.25	0.49	0.35	0.38		
v/c Ratio		0.92		1.16	1.23	0.39		1.76	0.45	0.44	1.23		
Control Delay		100.4		155.8	177.4	15.0		422.1	32.6	42.9	159.2		
Queue Delay		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total Delay		100.4		155.8	177.4	15.0		422.1	32.6	42.9	159.2		
LOS		F		F	F	B		F	C	D	F		
Approach Delay		100.4			139.0			178.9			137.4		
Approach LOS		F			F			F			F		
Queue Length 50th (ft)		239		~481	~513	25		~269	200	132	~1017		
Queue Length 95th (ft)		#413		#704	#738	95		#428	294	203	#1272		
Internal Link Dist (ft)		1086			597			396			1656		
Turn Bay Length (ft)				250		305							
Base Capacity (vph)		252		318	310	436		89	584	367	574		
Starvation Cap Reductn		0		0	0	0		0	0	0	0		
Spillback Cap Reductn		0		0	0	0		0	0	0	0		
Storage Cap Reductn		0		0	0	0		0	0	0	0		
Reduced v/c Ratio		0.92		1.16	1.23	0.39		1.76	0.45	0.44	1.23		

## Intersection Summary

Area Type: CBD  
Cycle Length: 160  
Actuated Cycle Length: 160  
Offset: 123 (77%), Referenced to phase 7:NBSB, Start of Green  
Natural Cycle: 145  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 1.76  
Intersection Signal Delay: 141.6  
Intersection LOS: F  
Intersection Capacity Utilization 85.9%  
ICU Level of Service E  
Analysis Period (min) 15  
- Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 44: Bennington Street &amp; Saratoga Street



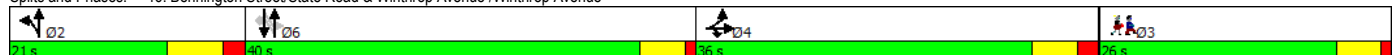
	↖	→	↗	↖	←	↖	↖	↑	↗	↘	↓	↙
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↖	↖	↖		↖	↖	↖	↖	
Traffic Volume (vph)	40	155	20	405	285	155	25	120	240	150	550	100
Future Volume (vph)	40	155	20	405	285	155	25	120	240	150	550	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	16	12	10	12	12	10	12
Total Lost time (s)		6.0		6.0	6.0	6.0		5.0	6.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		1.00	1.00	1.00	1.00	
Fit		0.99		1.00	1.00	0.85		1.00	0.85	1.00	0.98	
Fit Protected		0.99		0.95	0.99	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)		1371		1498	1459	1540		1436	1193	1504	1513	
Fit Permitted		0.85		0.95	0.99	1.00		0.25	1.00	0.54	1.00	
Satd. Flow (perm)		1176		1498	1459	1540		361	1193	857	1513	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	168	22	440	310	168	27	130	261	163	598	109
RTOR Reduction (vph)	0	2	0	0	0	109	0	0	0	0	4	0
Lane Group Flow (vph)	0	231	0	370	380	59	0	157	261	163	703	0
Heavy Vehicles (%)	7%	9%	15%	3%	3%	7%	11%	10%	9%	8%	2%	9%
Parking (#/hr)	1	1	1						1			1
Turn Type	Perm	NA		Split	NA	Prot	Perm	NA	pt+ov	D,P+P	NA	
Protected Phases		5		1	1	1		7	17	6	67	
Permitted Phases	5						7			7		
Actuated Green, G (s)		34.0		34.0	34.0	34.0		37.8	76.8	53.8	57.8	
Effective Green, g (s)		34.0		34.0	34.0	34.0		37.8	71.8	53.8	57.8	
Actuated g/C Ratio		0.21		0.21	0.21	0.21		0.24	0.45	0.34	0.36	
Clearance Time (s)		6.0		6.0	6.0	6.0		5.0		4.0		
Vehicle Extension (s)		4.0		4.0	4.0	4.0		4.0		2.0		
Lane Grp Cap (vph)		249		318	310	327		85	535	352	546	
v/s Ratio Prot				0.25	c0.26	0.04			0.22	0.05	c0.46	
v/s Ratio Perm		c0.20						c0.44		0.11		
v/c Ratio		0.93		1.16	1.23	0.18		1.85	0.49	0.46	1.29	
Uniform Delay, d1		61.8		63.0	63.0	51.6		61.1	31.1	39.7	51.1	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		40.8		102.5	126.9	1.2		422.8	3.2	0.4	142.9	
Delay (s)		102.5		165.5	189.9	52.8		483.9	34.3	40.0	194.0	
Level of Service		F		F	F	D		F	C	D	F	
Approach Delay (s)		102.5			155.0			203.2			165.2	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM 2000 Control Delay			161.8									
HCM 2000 Volume to Capacity ratio			1.22									
Actuated Cycle Length (s)			160.0						25.0			
Intersection Capacity Utilization			85.9%									
Analysis Period (min)			15									
c Critical Lane Group												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	40	105	375	0	0	0	355	190	35	15	715	180	
Future Volume (vph)	40	105	375	0	0	0	355	190	35	15	715	180	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	10	12	12	12	10	11	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		50	0		0	0		0	0		0	
Storage Lanes	0		1	0		0	1		0	0		1	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1563	1319	0	0	0	1472	1587	0	0	1690	1253	
Flt Permitted		0.986					0.111				0.992		
Satd. Flow (perm)	0	1563	1319	0	0	0	172	1587	0	0	1678	1253	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			308					10				133	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		988			531			233			338		
Travel Time (s)		22.5			12.1			5.3			7.7		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	5%	9%	2%	2%	2%	2%	3%	1%	6%	6%	1%	3%	
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	2	
Parking (#/hr)									1			1	
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	157	408	0	0	0	386	245	0	0	793	196	
Turn Type	Split	NA	Prot				D.P+P	NA		Perm	NA	Perm	
Protected Phases	4	4	4				2	2 6			6		3
Permitted Phases							6			6		6	
Detector Phase	4	4	4				2	2 6		6	6	6	
Switch Phase													
Minimum Initial (s)	5.0	5.0	5.0				5.0		5.0	5.0	5.0	1.0	
Minimum Split (s)	11.0	11.0	11.0				12.0		10.0	10.0	10.0	26.0	
Total Split (s)	36.0	36.0	36.0				21.0		40.0	40.0	40.0	26.0	
Total Split (%)	29.3%	29.3%	29.3%				17.1%		32.5%	32.5%	32.5%	21%	
Yellow Time (s)	4.0	4.0	4.0				5.0		4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0				2.0		1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		-2.0	-2.0				-1.0			-2.0	0.0		
Total Lost Time (s)		4.0	4.0				6.0			3.0	5.0		
Lead/Lag							Lead		Lag	Lag	Lag		
Lead-Lag Optimize?													
Recall Mode	None	None	None				Min		Max	Max	Max	None	
Act Effct Green (s)		20.3	20.3				49.2	55.2		37.2	35.1		
Actuated g/C Ratio		0.18	0.18				0.44	0.49		0.33	0.31		
v/c Ratio		0.55	0.83				1.54	0.31		1.42	0.40		
Control Delay		48.5	26.3				288.9	18.8		231.1	14.2		
Queue Delay		0.0	0.0				0.0	0.0		0.0	0.0		
Total Delay		48.5	26.3				288.9	18.8		231.1	14.2		
LOS		D	C				F	B		F	B		
Approach Delay		32.5						184.1		188.1			
Approach LOS		C						F		F			
Queue Length 50th (ft)		103	67				~340	92		~743	31		
Queue Length 95th (ft)		169	196				#614	185		#1137	108		
Internal Link Dist (ft)		908			451			153			258		
Turn Bay Length (ft)			50										
Base Capacity (vph)		449	598				251	789		558	485		
Starvation Cap Reductn		0	0				0	0		0	0		
Spillback Cap Reductn		0	0				0	0		0	0		
Storage Cap Reductn		0	0				0	0		0	0		
Reduced v/c Ratio		0.35	0.68				1.54	0.31		1.42	0.40		



















#### Intersection Summary

Area Type: CBD  
Cycle Length: 123  
Actuated Cycle Length: 111.7  
Natural Cycle: 150  
Control Type: Actuated-Uncoordinated  
Maximum v/c Ratio: 1.54  
Intersection Signal Delay: 146.7  
Intersection LOS: F  
Intersection Capacity Utilization 84.9%  
ICU Level of Service E  
Analysis Period (min) 15  
- Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 46: Bennington Street/State Road & Winthrop Avenue /Winthrop Avenue





												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	105	375	0	0	0	355	190	35	15	715	180
Future Volume (vph)	40	105	375	0	0	0	355	190	35	15	715	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	10	12	12	12	10	11	12	12	12	12
Total Lost time (s)		4.0	4.0				6.0	6.0			3.0	5.0
Lane Util. Factor		1.00	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.85				1.00	0.98			1.00	0.85
Flt Protected		0.99	1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)		1563	1319				1472	1586			1690	1253
Flt Permitted		0.99	1.00				0.11	1.00			0.99	1.00
Satd. Flow (perm)		1563	1319				172	1586			1677	1253
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	114	408	0	0	0	386	207	38	16	777	196
RTOR Reduction (vph)	0	0	252	0	0	0	0	5	0	0	0	91
Lane Group Flow (vph)	0	157	156	0	0	0	386	240	0	0	793	105
Heavy Vehicles (%)	5%	9%	2%	2%	2%	2%	3%	1%	6%	6%	1%	3%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	2
Parking (#/hr)									1			1
Turn Type	Split	NA	Prot				D.P+P	NA		Perm	NA	Perm
Protected Phases	4	4	4				2	2 6			6	
Permitted Phases							6			6		6
Actuated Green, G (s)		18.3	18.3				49.2	56.2			35.1	35.1
Effective Green, g (s)		20.3	20.3				51.2	57.2			37.1	35.1
Actuated g/C Ratio		0.18	0.18				0.46	0.51			0.33	0.31
Clearance Time (s)		6.0	6.0				7.0				5.0	5.0
Vehicle Extension (s)		3.0	3.0				3.0				3.0	3.0
Lane Grp Cap (vph)		284	239				254	812			557	394
v/s Ratio Prot		0.10	c0.12				c0.20	0.15				
v/s Ratio Perm							c0.49				0.47	0.08
v/c Ratio		0.55	0.65				1.52	0.30			1.42	0.27
Uniform Delay, d1		41.5	42.4				32.9	15.6			37.2	28.6
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		2.3	6.3				253.0	0.2			201.0	1.6
Delay (s)		43.8	48.6				285.9	15.8			238.2	30.3
Level of Service		D	D				F	B			F	C
Approach Delay (s)		47.3			0.0			181.1			197.0	
Approach LOS		D			A			F			F	
Intersection Summary												
HCM 2000 Control Delay			153.7				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			0.98									
Actuated Cycle Length (s)			111.6				Sum of lost time (s)			19.0		
Intersection Capacity Utilization			84.9%				ICU Level of Service			E		
Analysis Period (min)			15									
c Critical Lane Group												

Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL2	SBL	SBR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (vph)	15	355	635	435	5	5	15	10	25	0	965	10
Future Volume (vph)	15	355	635	435	5	5	15	10	25	0	965	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%	0%				0%		0%		
Storage Length (ft)		0			0			0	0	0	0	
Storage Lanes		2			0			1	0	0	3	
Taper Length (ft)		25						25		25		
Satd. Flow (prot)	0	3401	1845	3527	0	0	0	1694	0	0	3610	0
Flt Permitted		0.927						0.976				
Satd. Flow (perm)	0	3319	1845	3527	0	0	0	1694	0	0	3610	0
Right Turn on Red						Yes			Yes			Yes
Satd. Flow (RTOR)				1				127			127	
Link Speed (mph)			30	30				30		30		
Link Distance (ft)			635	988				259		1471		
Travel Time (s)			14.4	22.5				5.9		33.4		
Confl. Peds. (#/hr)		8				8				4		
Confl. Bikes (#/hr)											1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%	0%				0%		0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	402	690	483	0	0	0	54	0	0	1060	0
Turn Type	Prot	Split	NA	NA			Prot	Prot			Prot	
Protected Phases	1	6	6	3			4	4			2	
Permitted Phases												
Detector Phase	1	6	6	3			4	4			2	
Switch Phase												
Minimum Initial (s)	10.0	4.0	4.0	10.0			4.0	4.0			4.0	
Minimum Split (s)	15.0	22.0	22.0	22.5			22.0	22.0			20.0	
Total Split (s)	15.0	45.5	45.5	22.5			22.0	22.0			30.5	
Total Split (%)	16.7%	50.6%	50.6%	25.0%			24.4%	24.4%			33.9%	
Yellow Time (s)	4.0	3.5	3.5	3.5			3.5	3.5			3.5	
All-Red Time (s)	1.0	0.5	0.5	1.0			0.5	0.5			0.5	
Lost Time Adjust (s)		0.0	0.0	0.0				0.0			0.0	
Total Lost Time (s)		4.0	4.0	4.5				4.0			4.0	
Lead/Lag	Lag			Lag			Lead	Lead			Lead	
Lead-Lag Optimize?							Yes	Yes				
Recall Mode	Min	None	None	None			None	None			None	
Act Effct Green (s)		39.5	39.5	15.3				5.6			24.1	
Actuated g/C Ratio		0.58	0.58	0.22				0.08			0.35	
v/c Ratio		0.34	0.65	0.61				0.21			0.79	
Control Delay		11.1	15.1	28.7				1.9			23.3	
Queue Delay		0.0	0.0	0.0				0.0			0.0	
Total Delay		11.1	15.1	28.7				1.9			23.3	
LOS		B	B	C				A			C	
Approach Delay			13.6	28.7				1.9		23.3		
Approach LOS			B	C				A		C		
Queue Length 50th (ft)		45	217	109				0			171	
Queue Length 95th (ft)		72	356	157				0			242	
Internal Link Dist (ft)			555	908				179		1391		
Turn Bay Length (ft)												
Base Capacity (vph)		1253	1146	950				549			1508	
Starvation Cap Reductn		0	0	0				0			0	
Spillback Cap Reductn		0	0	0				0			0	
Storage Cap Reductn		0	0	0				0			0	
Reduced v/c Ratio		0.32	0.60	0.51				0.10			0.70	

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 68.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 19.9

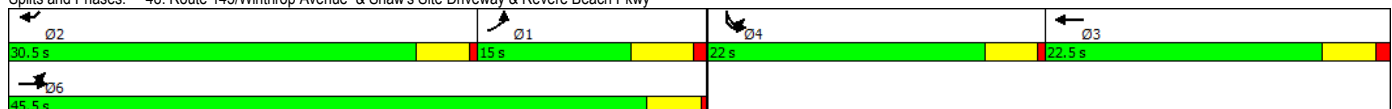
Intersection LOS: B


















Intersection Capacity Utilization 56.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 48: Route 145/Winthrop Avenue &amp; Shaw's Site Driveway &amp; Revere Beach Pkwy



													
Movement	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL2	SBL	SBR	SWL	SWR	SWR2	
Lane Configurations													
Traffic Volume (vph)	15	355	635	435	5	5	15	10	25	0	965	10	
Future Volume (vph)	15	355	635	435	5	5	15	10	25	0	965	10	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0	4.0	4.5				4.0			4.0		
Lane Util. Factor		0.97	1.00	0.95				1.00			0.76		
Frpb, ped/bikes		1.00	1.00	1.00				1.00			1.00		
Flpb, ped/bikes		1.00	1.00	1.00				1.00			1.00		
Frt		1.00	1.00	1.00				0.93			0.85		
Flt Protected		0.95	1.00	1.00				0.98			1.00		
Satd. Flow (prot)		3397	1845	3527				1695			3610		
Flt Permitted		0.93	1.00	1.00				0.98			1.00		
Satd. Flow (perm)		3314	1845	3527				1695			3610		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	16	386	690	473	5	5	16	11	27	0	1049	11	
RTOR Reduction (vph)	0	0	0	1	0	0	0	52	0	0	83	0	
Lane Group Flow (vph)	0	402	690	482	0	0	0	2	0	0	977	0	
Confl. Peds. (#/hr)		8				8				4			
Confl. Bikes (#/hr)											1		
Heavy Vehicles (%)	2%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Turn Type	Prot	Split	NA	NA			Prot	Prot			Prot		
Protected Phases	1	6	6	3			4	4			2		
Permitted Phases													
Actuated Green, G (s)		39.4	39.4	15.3				2.9			24.1		
Effective Green, g (s)		39.4	39.4	15.3				2.9			24.1		
Actuated g/C Ratio		0.56	0.56	0.22				0.04			0.34		
Clearance Time (s)		4.0	4.0	4.5				4.0			4.0		
Vehicle Extension (s)		3.0	3.0	4.0				3.0			3.0		
Lane Grp Cap (vph)		1874	1036	769				70			1241		
v/s Ratio Prot		0.03	c0.37	c0.14				c0.00			c0.27		
v/s Ratio Perm		0.09											
v/c Ratio		0.21	0.67	0.63				0.03			0.79		
Uniform Delay, d1		14.0	10.7	24.8				32.3			20.7		
Progression Factor		1.00	1.00	1.00				1.00			1.00		
Incremental Delay, d2		0.1	1.6	1.8				0.2			3.4		
Delay (s)		14.1	12.4	26.6				32.4			24.1		
Level of Service		B	B	C				C			C		
Approach Delay (s)			13.0	26.6				32.4		24.1			
Approach LOS			B	C				C		C			
Intersection Summary													
HCM 2000 Control Delay			20.2	HCM 2000 Level of Service						C			
HCM 2000 Volume to Capacity ratio			0.72										
Actuated Cycle Length (s)			70.1	Sum of lost time (s)						17.5			
Intersection Capacity Utilization			56.7%	ICU Level of Service						B			
Analysis Period (min)			15										
c Critical Lane Group													

Lanes, Volumes, Timings  
12: Route 60

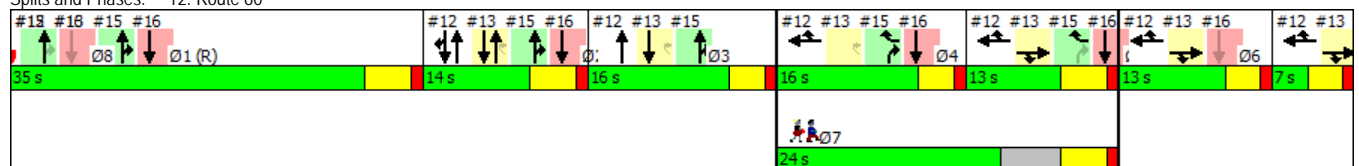
11/27/2017

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø2	Ø3	Ø4
Lane Configurations					↕↕	↗		↕↕			↕↕	↗				
Traffic Volume (vph)	0	0	0	0	1030	285	0	695	0	0	900	345				
Future Volume (vph)	0	0	0	0	1030	285	0	695	0	0	900	345				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Satd. Flow (prot)	0	0	0	0	3406	1538	0	3282	0	0	3343	1524				
Flt Permitted																
Satd. Flow (perm)	0	0	0	0	3406	1538	0	3282	0	0	3343	1524				
Right Turn on Red			Yes			Yes			Yes			Yes				
Satd. Flow (RTOR)						166						312				
Link Speed (mph)		30			30			30			30					
Link Distance (ft)		244			245			403			338					
Travel Time (s)		5.5			5.6			9.2			7.7					
Confl. Peds. (#/hr)						19										
Confl. Bikes (#/hr)						1										
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92				
Heavy Vehicles (%)	2%	2%	2%	2%	6%	5%	2%	10%	2%	2%	8%	6%				
Shared Lane Traffic (%)																
Lane Group Flow (vph)	0	0	0	0	1120	310	0	755	0	0	978	375				
Turn Type					NA	Prot		NA			NA	Prot				
Protected Phases					4 5 6 8	4 5 6 8		1 2 3			1 2	1 2	1	2	3	4
Permitted Phases																
Minimum Split (s)													10.0	19.0	16.0	16.0
Total Split (s)													35.0	14.0	16.0	16.0
Total Split (%)													31%	12%	14%	14%
Yellow Time (s)													4.0	4.0	3.0	3.0
All-Red Time (s)													1.0	1.0	1.0	1.0
Lost Time Adjust (s)																
Total Lost Time (s)																
Lead/Lag													Lead	Lag		Lead
Lead-Lag Optimize?																
Act Effct Green (s)					45.0	45.0		60.0			44.0	44.0				
Actuated g/C Ratio					0.39	0.39		0.53			0.39	0.39				
v/c Ratio					0.83	0.44		0.44			0.76	0.48				
Control Delay					41.8	16.7		0.6			35.0	7.3				
Queue Delay					49.6	3.7		0.1			0.0	0.0				
Total Delay					91.4	20.4		0.8			35.0	7.3				
LOS					F	C		A			D	A				
Approach Delay					76.0			0.8			27.3					
Approach LOS					E			A			C					
Queue Length 50th (ft)					421	85		0			323	29				
Queue Length 95th (ft)					511	m110		0			404	104				
Internal Link Dist (ft)		164			165			323			258					
Turn Bay Length (ft)																
Base Capacity (vph)					1344	707		1727			1290	779				
Starvation Cap Reductn					556	305		203			0	0				
Spillback Cap Reductn					0	0		0			0	0				
Storage Cap Reductn					0	0		0			0	0				
Reduced v/c Ratio					1.42	0.77		0.50			0.76	0.48				

Intersection Summary

Area Type:	Other
Cycle Length: 114	
Actuated Cycle Length: 114	
Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green	
Natural Cycle: 120	
Control Type: Pretimed	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 41.3	Intersection LOS: D
Intersection Capacity Utilization 60.9%	ICU Level of Service B
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	


















Splits and Phases: 12: Route 60



Lane Group	Ø5	Ø6	Ø7	Ø8
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	5	6	7	8
Permitted Phases				
Minimum Split (s)	13.0	13.0	24.0	9.0
Total Split (s)	13.0	13.0	24.0	7.0
Total Split (%)	11%	11%	21%	6%
Yellow Time (s)	4.0	3.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead		Lag
Lead-Lag Optimize?				
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				
Intersection Summary				

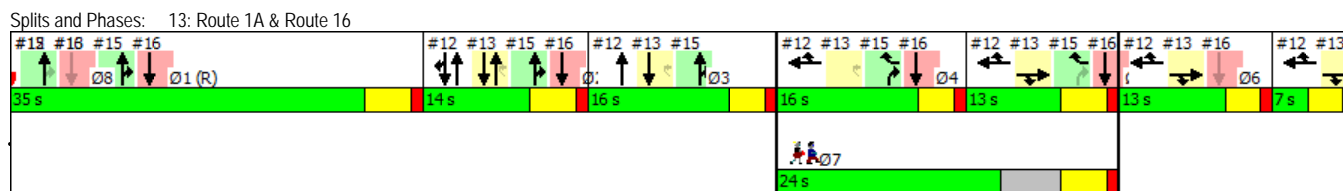
HCM Signalized Intersection Capacity Analysis  
12: Route 60

11/27/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1030	285	0	695	0	0	900	345
Future Volume (vph)	0	0	0	0	1030	285	0	695	0	0	900	345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		5.0			5.0	5.0
Lane Util. Factor					0.95	1.00		0.95			0.95	1.00
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					3406	1538		3282			3343	1524
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					3406	1538		3282			3343	1524
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1120	310	0	755	0	0	978	375
RTOR Reduction (vph)	0	0	0	0	0	108	0	0	0	0	0	192
Lane Group Flow (vph)	0	0	0	0	1120	202	0	755	0	0	978	183
Confl. Peds. (#/hr)					19							
Confl. Bikes (#/hr)					1							
Heavy Vehicles (%)	2%	2%	2%	2%	6%	5%	2%	10%	2%	2%	8%	6%
Turn Type					NA	Prot		NA			NA	Prot
Protected Phases					4 5 6 8	4 5 6 8		1 2 3			1 2	1 2
Permitted Phases												
Actuated Green, G (s)					45.0	45.0		61.0			44.0	44.0
Effective Green, g (s)					40.0	40.0		61.0			44.0	44.0
Actuated g/C Ratio					0.35	0.35		0.54			0.39	0.39
Clearance Time (s)												
Lane Grp Cap (vph)					1195	539		1756			1290	588
v/s Ratio Prot					c0.33	0.13		c0.23			c0.29	0.12
v/s Ratio Perm												
v/c Ratio					0.94	0.38		0.43			0.76	0.31
Uniform Delay, d1					35.8	27.7		16.0			30.4	24.4
Progression Factor					1.17	1.34		0.00			1.00	1.00
Incremental Delay, d2					11.9	1.5		0.6			4.2	1.4
Delay (s)					53.9	38.5		0.6			34.6	25.8
Level of Service					D	D		A			C	C
Approach Delay (s)		0.0			50.6			0.6			32.2	
Approach LOS		A			D			A			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			32.9		HCM 2000 Level of Service					C		
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			114.0		Sum of lost time (s)				31.0			
Intersection Capacity Utilization			60.9%		ICU Level of Service					B		
Analysis Period (min)			15									
c Critical Lane Group												

## 11/27/2017

Intersection Summary	
Area Type:	Other
Cycle Length:	114
Actuated Cycle Length:	114
Offset:	73 (64%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle:	120
Control Type:	Pretimed
Maximum v/c Ratio:	1.07
Intersection Signal Delay:	32.3
Intersection Capacity Utilization Err%	Intersection LOS: C
Analysis Period (min)	ICU Level of Service H
15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	



HCM Signalized Intersection Capacity Analysis  
13: Route 1A & Route 16

11/27/2017

	→	↘	↑	↗	↓	↙
Movement	EBT	EBR2	NBT	NBR	SBT	NWR2
Lane Configurations	↑↑	↗↗	↑↑	↗	↑↑	↗↗
Traffic Volume (vph)	535	905	695	385	900	615
Future Volume (vph)	535	905	695	385	900	615
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.95	0.88	0.95	1.00	0.95	0.88
Frt	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)	3406	2707	3252	1482	3343	2760
Flt Permitted	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (perm)	3406	2707	3252	1482	3343	2760
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	582	984	755	418	978	668
RTOR Reduction (vph)	0	388	0	0	0	116
Lane Group Flow (vph)	582	596	755	418	978	552
Heavy Vehicles (%)	6%	5%	11%	9%	8%	3%
Turn Type	NA	Prot	NA	custom	NA	Perm
Protected Phases	5 6 8	5 6 8	1 2	1	1 2 3	
Permitted Phases						2 3 4
Actuated Green, G (s)	29.0	29.0	44.0	30.0	61.0	42.0
Effective Green, g (s)	25.0	25.0	44.0	30.0	61.0	38.0
Actuated g/C Ratio	0.22	0.22	0.39	0.26	0.54	0.33
Clearance Time (s)				5.0		
Lane Grp Cap (vph)	746	593	1255	390	1788	920
v/s Ratio Prot	0.17	c0.22	0.23	c0.28	c0.29	
v/s Ratio Perm						c0.20
v/c Ratio	0.78	1.01	0.60	1.07	0.55	0.60
Uniform Delay, d1	41.9	44.5	28.0	42.0	17.4	31.7
Progression Factor	0.69	0.40	1.00	1.00	0.00	1.00
Incremental Delay, d2	7.5	37.2	2.1	66.0	0.8	2.9
Delay (s)	36.4	55.1	30.1	108.0	0.8	34.6
Level of Service	D	E	C	F	A	C
Approach Delay (s)	48.2		57.9		0.8	
Approach LOS	D		E		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay			38.1		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.97			
Actuated Cycle Length (s)			114.0		Sum of lost time (s)	31.0
Intersection Capacity Utilization			Err%		ICU Level of Service	H
Analysis Period (min)			15			
c Critical Lane Group						



Lanes, Volumes, Timings  
15: VFW Parkway

11/27/2017

	↖	↗	↑	↘	↙	↓								
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations		↗↗	↑↑	↘↘										
Traffic Volume (vph)	0	1005	370	1165	0	0								
Future Volume (vph)	0	1005	370	1165	0	0								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Satd. Flow (prot)	0	2707	3406	2707	0	0								
Flt Permitted														
Satd. Flow (perm)	0	2707	3406	2707	0	0								
Right Turn on Red		Yes		Yes										
Satd. Flow (RTOR)		956		1266										
Link Speed (mph)	30		30		30									
Link Distance (ft)	507		317		245									
Travel Time (s)	11.5		7.2		5.6									
Confl. Peds. (#/hr)		9												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	2%	5%	6%	5%	2%	2%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	1092	402	1266	0	0								
Turn Type		custom	NA	custom										
Protected Phases		4 5	1 2 3 8	1 2 3 4			1	2	3	4	5	6	7	8
Permitted Phases				5 8										
Minimum Split (s)							10.0	19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)							35.0	14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)							31%	12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)							4.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)														
Total Lost Time (s)														
Lead/Lag							Lead	Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?														
Act Effect Green (s)		25.0	67.0	96.0										
Actuated g/C Ratio		0.22	0.59	0.84										
v/c Ratio		0.82	0.20	0.51										
Control Delay		11.5	8.7	2.8										
Queue Delay		48.7	0.7	0.6										
Total Delay		60.2	9.4	3.4										
LOS		E	A	A										
Approach Delay	60.2		4.8											
Approach LOS	E		A											
Queue Length 50th (ft)		47	64	0										
Queue Length 95th (ft)		141	m90	m109										
Internal Link Dist (ft)	427		237		165									
Turn Bay Length (ft)														
Base Capacity (vph)		1339	2001	2479										
Starvation Cap Reductn		0	1238	727										
Spillback Cap Reductn		364	800	0										
Storage Cap Reductn		0	0	0										
Reduced v/c Ratio		1.12	0.53	0.72										

Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 26.7

Intersection LOS: C

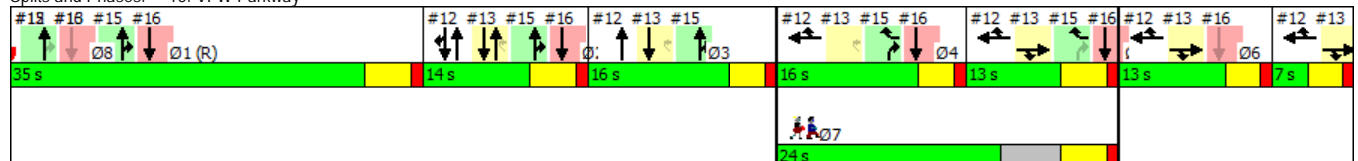
Intersection Capacity Utilization 53.8%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 15: VFW Parkway






HCM Signalized Intersection Capacity Analysis  
15: VFW Parkway

11/27/2017

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↶↶	↶↶	↶↶		
Traffic Volume (vph)	0	1005	370	1165	0	0
Future Volume (vph)	0	1005	370	1165	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.0	5.0		
Lane Util. Factor		0.88	0.95	0.88		
Frbp, ped/bikes		1.00	1.00	1.00		
Flpb, ped/bikes		1.00	1.00	1.00		
Frt		0.85	1.00	0.85		
Flt Protected		1.00	1.00	1.00		
Satd. Flow (prot)		2707	3406	2707		
Flt Permitted		1.00	1.00	1.00		
Satd. Flow (perm)		2707	3406	2707		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1092	402	1266	0	0
RTOR Reduction (vph)	0	755	0	333	0	0
Lane Group Flow (vph)	0	337	402	933	0	0
Confl. Peds. (#/hr)		9				
Heavy Vehicles (%)	2%	5%	6%	5%	2%	2%
Turn Type		custom	NA	custom		
Protected Phases		4 5	1 2 3 8	1 2 3 4		
Permitted Phases				5 8		
Actuated Green, G (s)		24.0	68.0	88.0		
Effective Green, g (s)		24.0	64.0	84.0		
Actuated g/C Ratio		0.21	0.56	0.74		
Clearance Time (s)						
Lane Grp Cap (vph)		569	1912	1994		
v/s Ratio Prot		c0.12	0.12	c0.30		
v/s Ratio Perm				0.05		
v/c Ratio		0.59	0.21	0.47		
Uniform Delay, d1		40.6	12.4	6.0		
Progression Factor		1.00	0.77	24.65		
Incremental Delay, d2		4.5	0.2	0.5		
Delay (s)		45.1	9.8	149.0		
Level of Service		D	A	F		
Approach Delay (s)	45.1		115.4		0.0	
Approach LOS	D		F		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		87.6		HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio		0.53				
Actuated Cycle Length (s)		114.0		Sum of lost time (s)	31.0	
Intersection Capacity Utilization		53.8%		ICU Level of Service	A	
Analysis Period (min)		15				
c Critical Lane Group						

Lanes, Volumes, Timings  
16: Beach Street

11/27/2017

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations														
Traffic Volume (vph)	0	380	0	0	1060	315								
Future Volume (vph)	0	380	0	0	1060	315								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Satd. Flow (prot)	0	1565	0	0	3438	1509								
Flt Permitted														
Satd. Flow (perm)	0	1536	0	0	3438	1467								
Right Turn on Red		Yes				Yes								
Satd. Flow (RTOR)		295				196								
Link Speed (mph)	30			30	30									
Link Distance (ft)	572			272	244									
Travel Time (s)	13.0			6.2	5.5									
Confl. Peds. (#/hr)		23				17								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	2%	5%	2%	2%	5%	7%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	413	0	0	1152	342								
Turn Type		Free			NA	Free								
Protected Phases					1 2 4 5		1	2	3	4	5	6	7	8
Permitted Phases		Free			6 8	Free								
Minimum Split (s)							10.0	19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)							35.0	14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)							31%	12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)							4.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)														
Total Lost Time (s)														
Lead/Lag							Lead	Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?														
Act Effect Green (s)		114.0			93.0	114.0								
Actuated g/C Ratio		1.00			0.82	1.00								
v/c Ratio		0.27			0.41	0.23								
Control Delay		0.4			0.8	0.2								
Queue Delay		0.0			0.5	0.0								
Total Delay		0.4			1.3	0.2								
LOS		A			A	A								
Approach Delay	0.4				1.0									
Approach LOS	A				A									
Queue Length 50th (ft)		0			15	0								
Queue Length 95th (ft)		0			14	m0								
Internal Link Dist (ft)	492			192	164									
Turn Bay Length (ft)														
Base Capacity (vph)		1536			2804	1467								
Starvation Cap Reductn		0			1104	0								
Spillback Cap Reductn		30			67	0								
Storage Cap Reductn		0			0	0								
Reduced v/c Ratio		0.27			0.68	0.23								

Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 0.9

Intersection LOS: A

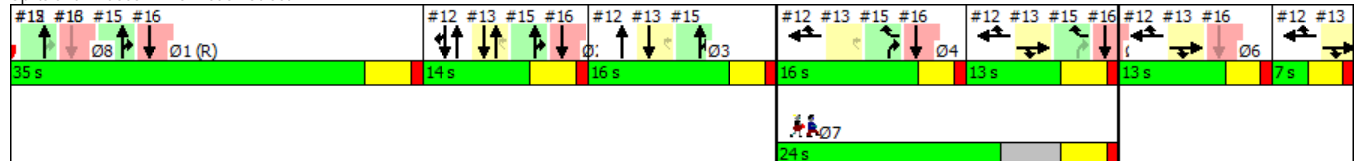
Intersection Capacity Utilization 45.5%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.





Splits and Phases: 16: Beach Street



HCM Signalized Intersection Capacity Analysis  
16: Beach Street










11/27/2017













Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗			↗↗	↗
Traffic Volume (vph)	0	380	0	0	1060	315
Future Volume (vph)	0	380	0	0	1060	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			5.0	4.0
Lane Util. Factor		1.00			0.95	1.00
Frpb, ped/bikes		0.98			1.00	0.97
Flpb, ped/bikes		1.00			1.00	1.00
Frt		0.86			1.00	0.85
Flt Protected		1.00			1.00	1.00
Satd. Flow (prot)		1536			3438	1467
Flt Permitted		1.00			1.00	1.00
Satd. Flow (perm)		1536			3438	1467
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	413	0	0	1152	342
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	413	0	0	1152	342
Confl. Peds. (#/hr)		23				17
Heavy Vehicles (%)	2%	5%	2%	2%	5%	7%
Turn Type		Free			NA	Free
Protected Phases					1 2 4 5	
Permitted Phases		Free			6 8	Free
Actuated Green, G (s)		114.0			84.0	114.0
Effective Green, g (s)		114.0			76.0	114.0
Actuated g/C Ratio		1.00			0.67	1.00
Clearance Time (s)						
Lane Grp Cap (vph)		1536			2442	1467
v/s Ratio Prot					c0.26	
v/s Ratio Perm		c0.27			0.07	0.23
v/c Ratio		0.27			0.47	0.23
Uniform Delay, d1		0.0			9.2	0.0
Progression Factor		1.00			0.16	1.00
Incremental Delay, d2		0.4			0.4	0.2
Delay (s)		0.4			1.9	0.2
Level of Service		A			A	A
Approach Delay (s)	0.4			0.0	1.5	
Approach LOS	A			A	A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		1.3		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.52				
Actuated Cycle Length (s)		114.0		Sum of lost time (s)		31.0
Intersection Capacity Utilization		45.5%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	135	1200	70	0	2590
Future Volume (vph)	0	135	1200	70	0	2590
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1774	3264	0	0	3438
Flt Permitted						
Satd. Flow (perm)	0	1774	3264	0	0	3438
Link Speed (mph)	30		30			30
Link Distance (ft)	1034		925			475
Travel Time (s)	23.5		21.0			10.8
Confl. Peds. (#/hr)				1	1	
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	9%	22%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	147	1380	0	0	2815
Sign Control	Stop		Free			Free

#### Intersection Summary

Area Type: Other  
Control Type: Unsignalized  
Intersection Capacity Utilization 74.9% ICU Level of Service D  
Analysis Period (min) 15

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	135	1200	70	0	2590
Future Volume (Veh/h)	0	135	1200	70	0	2590
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	147	1304	76	0	2815
Pedestrians	1					
Lane Width (ft)	16.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			925			880
pX, platoon unblocked	0.43	0.81			0.81	
vC, conflicting volume	2750	691			1381	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	381	134			990	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	79			100	
cM capacity (veh/h)	257	709			568	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	147	869	511	1408	1408	
Volume Left	0	0	0	0	0	
Volume Right	147	0	76	0	0	
cSH	709	1700	1700	1700	1700	
Volume to Capacity	0.21	0.51	0.30	0.83	0.83	
Queue Length 95th (ft)	19	0	0	0	0	
Control Delay (s)	11.4	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.4	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			74.9%		ICU Level of Service	D
Analysis Period (min)			15			

							
Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	210	10	55	1230	50	0	2325
Future Volume (vph)	210	10	55	1230	50	0	2325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	11	11	11	11
Grade (%)	0%			0%			0%
Storage Length (ft)	0	0	0		0	150	
Storage Lanes	1	1	0		0	1	
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1888	1595	0	3207	0	1837	3323
Flt Permitted	0.950			0.998			
Satd. Flow (perm)	1888	1595	0	3207	0	1837	3323
Link Speed (mph)	30			30			30
Link Distance (ft)	3577			475			405
Travel Time (s)	81.3			10.8			9.2
Confl. Peds. (#/hr)		2			2	2	
Confl. Bikes (#/hr)							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	8%	2%	8%	13%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%			0%
Shared Lane Traffic (%)							
Lane Group Flow (vph)	228	11	0	1451	0	0	2527
Sign Control	Stop			Free			Free













#### Intersection Summary

Area Type: Other










Control Type: Unsignalized

Intersection Capacity Utilization 94.6% ICU Level of Service F

Analysis Period (min) 15

							
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	210	10	55	1230	50	0	2325
Future Volume (Veh/h)	210	10	55	1230	50	0	2325
Sign Control	Stop			Free			Free
Grade	0%			0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	228	11	0	1337	54	0	2527
Pedestrians	2						2
Lane Width (ft)	14.0						11.0
Walking Speed (ft/s)	4.0						4.0
Percent Blockage	0						0
Right turn flare (veh)							
Median type				None			None
Median storage (veh)							
Upstream signal (ft)							405
pX, platoon unblocked	0.32		0.00				
vC, conflicting volume	2630	700	0			1393	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1828	700	0			1393	
tC, single (s)	6.8	7.1	0.0			4.1	
tC, 2 stage (s)							
tF (s)	3.5	3.4	0.0			2.2	
p0 queue free %	0	97	0			100	
cM capacity (veh/h)	21	367	0			496	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	228	11	891	500	0	1264	1264
Volume Left	228	0	0	0	0	0	0
Volume Right	0	11	0	54	0	0	0
cSH	21	367	1700	1700	1700	1700	1700
Volume to Capacity	10.61	0.03	0.52	0.29	0.00	0.74	0.74
Queue Length 95th (ft)	Err	2	0	0	0	0	0
Control Delay (s)	Err	15.1	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	9539.5		0.0		0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			548.5				
Intersection Capacity Utilization			94.6%		ICU Level of Service		F
Analysis Period (min)			15				



						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	40	1255	40	0	2390
Future Volume (vph)	0	40	1255	40	0	2390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	11	11	11	11
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1514	3156	0	0	3292
Flt Permitted						
Satd. Flow (perm)	0	1514	3156	0	0	3292
Link Speed (mph)	30		30			30
Link Distance (ft)	911		2394			546
Travel Time (s)	20.7		54.4			12.4
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	23%	10%	11%	0%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	43	1407	0	0	2598
Sign Control	Stop		Free			Free










#### Intersection Summary











Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 69.4% ICU Level of Service C

Analysis Period (min) 15

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	40	1255	40	0	2390
Future Volume (Veh/h)	0	40	1255	40	0	2390
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	43	1364	43	0	2598
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2684	704			1407	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2684	704			1407	
tC, single (s)	6.8	7.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.5			2.2	
p0 queue free %	100	87			100	
cM capacity (veh/h)	18	335			491	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	43	909	498	1299	1299	
Volume Left	0	0	0	0	0	
Volume Right	43	0	43	0	0	
cSH	335	1700	1700	1700	1700	
Volume to Capacity	0.13	0.53	0.29	0.76	0.76	
Queue Length 95th (ft)	11	0	0	0	0	
Control Delay (s)	17.3	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	17.3	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization		69.4%		ICU Level of Service	C	
Analysis Period (min)		15				

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	180	290	290	5	5	1085
Future Volume (vph)	180	290	290	5	5	1085
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1599	1403	3533	0	0	3354
Flt Permitted	0.950					
Satd. Flow (perm)	1599	1403	3533	0	0	3354
Link Speed (mph)	30		30			30
Link Distance (ft)	817		1471			233
Travel Time (s)	18.6		33.4			5.3
Confl. Peds. (#/hr)	1	1		84		
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	3%	2%	0%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	1	1		1		1
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	196	315	320	0	0	1184
Sign Control	Stop		Free			Free











#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 50.2% ICU Level of Service A

Analysis Period (min) 15

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	180	290	290	5	5	1085
Future Volume (Veh/h)	180	290	290	5	5	1085
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	196	315	315	5	5	1179
Pedestrians	84		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	7		0			0
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						233
pX, platoon unblocked						
vC, conflicting volume	1002	245			404	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1002	245			404	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	12	55			100	
cM capacity (veh/h)	223	699			1084	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	196	315	210	110	398	786
Volume Left	196	0	0	0	5	0
Volume Right	0	315	0	5	0	0
cSH	223	699	1700	1700	1084	1700
Volume to Capacity	0.88	0.45	0.12	0.06	0.00	0.46
Queue Length 95th (ft)	177	59	0	0	0	0
Control Delay (s)	78.6	14.3	0.0	0.0	0.2	0.0
Lane LOS	F	B			A	
Approach Delay (s)	39.0		0.0		0.1	
Approach LOS	E					
Intersection Summary						
Average Delay			9.9			
Intersection Capacity Utilization			50.2%		ICU Level of Service	A
Analysis Period (min)			15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (vph)	80	15	85	230	25	240	40	50	2355	140	205	1545	20
Future Volume (vph)	80	15	85	230	25	240	40	50	2355	140	205	1545	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	12	12	10	10	12	11	11	11	11	11	12
Grade (%)		0%			0%				0%			0%	
Storage Length (ft)	130		0	0		250		400		500	380		0
Storage Lanes	1		0	0		1		1		1	1		0
Taper Length (ft)	25			25				25			25		
Satd. Flow (prot)	1668	1475	0	0	1624	1436	0	1447	3355	1546	1728	3260	0
Flt Permitted	0.154				0.506			0.950			0.950		
Satd. Flow (perm)	270	1475	0	0	859	1436	0	1446	3355	1546	1728	3260	0
Right Turn on Red			Yes			No				Yes			Yes
Satd. Flow (RTOR)		92								123		1	
Link Speed (mph)		30			30				30			30	
Link Distance (ft)		537			1355				733			925	
Travel Time (s)		12.2			30.8				16.7			21.0	
Confl. Peds. (#/hr)	7						7	1					1
Confl. Bikes (#/hr)													1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	6%	9%	5%	0%	5%	0%	37%	4%	1%	1%	5%	11%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	8	0
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%				0%			0%	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	87	108	0	0	277	261	0	97	2560	152	223	1701	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases		8			4	4 5	1	1	6	6	5	2	
Permitted Phases	8			4									
Detector Phase	8	8		4	4	4 5	1	1	6	6	5	2	
Switch Phase													
Minimum Initial (s)	6.0	6.0		6.0	6.0		6.0	6.0	20.0	20.0	6.0	20.0	
Minimum Split (s)	26.0	26.0		12.0	12.0		12.0	12.0	27.0	27.0	13.5	31.0	
Total Split (s)	31.0	31.0		18.0	18.0		31.0	31.0	137.0	137.0	32.5	137.0	
Total Split (%)	15.5%	15.5%		9.0%	9.0%		15.5%	15.5%	68.3%	68.3%	16.2%	68.3%	
Yellow Time (s)	3.0	3.0		4.0	4.0		4.0	4.0	5.0	5.0	5.5	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	5.0	5.0			6.0			5.0	6.0	6.0	6.5	6.0	
Lead/Lag							Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?													
Recall Mode	None	None		None	None		None	None	Min	Min	None	Min	
Act Effct Green (s)	26.0	26.0			25.0	57.5		18.8	131.0	131.0	26.0	139.7	
Actuated g/C Ratio	0.13	0.13			0.12	0.29		0.09	0.65	0.65	0.13	0.70	
v/c Ratio	2.49	0.40			2.59	0.64		0.72	1.17	0.14	1.00	0.75	
Control Delay	774.2	22.9			768.7	70.5		115.2	113.7	3.3	142.6	22.6	
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	774.2	22.9			768.7	70.5		115.2	113.7	3.3	142.6	22.6	
LOS	F	C			F	E		F	F	A	F	C	
Approach Delay		358.1			430.0				107.8			36.5	
Approach LOS		F			F				F			D	
Queue Length 50th (ft)	~190	19			~610	304		127	~2103	13	300	712	
Queue Length 95th (ft)	#326	88			#820	419		194	#2192	43	#497	898	
Internal Link Dist (ft)		457			1275				653			845	
Turn Bay Length (ft)	130					250		400		500	380		
Base Capacity (vph)	35	271			107	411		187	2192	1052	224	2272	
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0	
Storage Cap Reductn	0	0			0	0		0	0	0	0	0	
Reduced v/c Ratio	2.49	0.40			2.59	0.64		0.52	1.17	0.14	1.00	0.75	

## Intersection Summary

Area Type: Other

Cycle Length: 200.5

Actuated Cycle Length: 200.5

Natural Cycle: 150

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 2.59

Intersection Signal Delay: 123.4

Intersection LOS: F

Intersection Capacity Utilization 112.6%

ICU Level of Service H

Analysis Period (min) 15

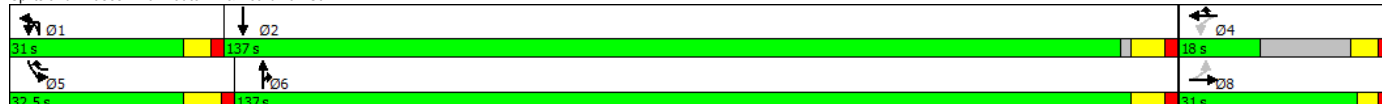
- Volume exceeds capacity, queue is theoretically infinite.
























Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Route 1A &amp; Boardman St



													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (vph)	80	15	85	230	25	240	40	50	2355	140	205	1545	20
Future Volume (vph)	80	15	85	230	25	240	40	50	2355	140	205	1545	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	12	12	10	10	12	11	11	11	11	11	12
Total Lost time (s)	5.0	5.0			6.0	6.0		5.0	6.0	6.0	6.5	6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.87			1.00	0.85		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00			0.96	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1668	1476			1624	1436		1447	3355	1546	1728	3261	
Flt Permitted	0.15	1.00			0.51	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	270	1476			859	1436		1447	3355	1546	1728	3261	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	16	92	250	27	261	43	54	2560	152	223	1679	22
RTOR Reduction (vph)	0	80	0	0	0	0	0	0	0	43	0	0	0
Lane Group Flow (vph)	87	28	0	0	277	261	0	97	2560	109	223	1701	0
Confl. Peds. (#/hr)	7					7		1					1
Confl. Bikes (#/hr)													1
Heavy Vehicles (%)	1%	6%	9%	5%	0%	5%	0%	37%	4%	1%	1%	5%	11%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	8	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases		8			4	4.5	1	1	6	6	5	2	
Permitted Phases	8			4									
Actuated Green, G (s)	26.0	26.0			25.0	56.0		17.8	130.0	130.0	25.0	138.7	
Effective Green, g (s)	26.0	26.0			25.0	56.0		18.8	131.0	131.0	26.0	139.7	
Actuated g/C Ratio	0.13	0.13			0.12	0.28		0.09	0.65	0.65	0.13	0.70	
Clearance Time (s)	5.0	5.0			6.0			6.0	7.0	7.0	7.5	7.0	
Vehicle Extension (s)	2.0	2.0			2.0			2.0	4.0	4.0	2.0	4.0	
Lane Grp Cap (vph)	35	191			107	401		135	2192	1010	224	2272	
v/s Ratio Prot		0.02				0.18		0.07	c0.76	0.07	c0.13	0.52	
v/s Ratio Perm	0.32				c0.32								
v/c Ratio	2.49	0.15			2.59	0.65		0.72	1.17	0.11	1.00	0.75	
Uniform Delay, d1	87.2	77.4			87.8	63.6		88.3	34.8	13.0	87.2	19.3	
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	745.7	0.1			741.4	2.9		14.1	80.9	0.1	58.5	1.5	
Delay (s)	833.0	77.5			829.1	66.5		102.4	115.6	13.0	145.7	20.7	
Level of Service	F	E			F	E		F	F	B	F	C	
Approach Delay (s)		414.6			459.2			109.6				35.2	
Approach LOS		F			F			F				D	
<b>Intersection Summary</b>													
HCM 2000 Control Delay		128.7							F				
HCM 2000 Volume to Capacity ratio		1.35											
Actuated Cycle Length (s)		200.5							19.5				
Intersection Capacity Utilization		112.6%							H				
Analysis Period (min)		15											
c Critical Lane Group													
















Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔						↔			↔	
Traffic Volume (vph)	130	10	5	0	0	0	0	2355	0	0	1780	0
Future Volume (vph)	130	10	5	0	0	0	0	2355	0	0	1780	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	12	12	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1855	0	0	0	0	0	3355	0	0	3355	0
Flt Permitted		0.957										
Satd. Flow (perm)	0	1855	0	0	0	0	0	3355	0	0	3355	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		122			363			405			225	
Travel Time (s)		2.8			8.3			9.2			5.1	
Confl. Peds. (#/hr)									1			
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	88%	0%	2%	2%	2%	0%	4%	0%	0%	4%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	157	0	0	0	0	0	2560	0	0	1935	0
Turn Type	Perm	NA						NA			NA	
Protected Phases		2						1			1	
Permitted Phases	2											
Detector Phase	2	2						1			1	
Switch Phase												
Minimum Initial (s)	10.0	10.0						20.0			20.0	
Minimum Split (s)	16.0	16.0						27.0			27.0	
Total Split (s)	36.0	36.0						55.0			55.0	
Total Split (%)	39.6%	39.6%						60.4%			60.4%	
Yellow Time (s)	4.0	4.0						5.0			5.0	
All-Red Time (s)	2.0	2.0						2.0			2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.0						7.0			7.0	
Lead/Lag	Lag	Lag						Lead			Lead	
Lead-Lag Optimize?												
Recall Mode	None	None						Max			Max	
Act Effct Green (s)		12.6						48.1			48.1	
Actuated g/C Ratio		0.17						0.65			0.65	
v/c Ratio		0.49						1.17			0.88	
Control Delay		32.8						98.9			17.8	
Queue Delay		0.0						0.0			0.0	
Total Delay		32.8						98.9			17.8	
LOS		C						F			B	
Approach Delay		32.8						98.9			17.8	
Approach LOS		C						F			B	
Queue Length 50th (ft)		65						~738			322	
Queue Length 95th (ft)		118						#956			#617	
Internal Link Dist (ft)		42			283			325			145	
Turn Bay Length (ft)												
Base Capacity (vph)		757						2188			2188	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.21						1.17			0.88	

#### Intersection Summary

Area Type: Other  
Cycle Length: 91  
Actuated Cycle Length: 73.7  
Natural Cycle: 90  
Control Type: Semi Act-Uncoord  
Maximum v/c Ratio: 1.17  
Intersection Signal Delay: 63.0 Intersection LOS: E  
Intersection Capacity Utilization 84.3% ICU Level of Service E  
Analysis Period (min) 15  
- Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 9: Route 1A & Jughandle



												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	10	5	0	0	0	0	2355	0	0	1780	0
Future Volume (vph)	130	10	5	0	0	0	0	2355	0	0	1780	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	16	16	16	12	12	12	11	11	11	11	11	11
Total Lost time (s)		6.0						7.0			7.0	
Lane Util. Factor		1.00						0.95			0.95	
Frpb, ped/bikes		1.00						1.00			1.00	
Flpb, ped/bikes		1.00						1.00			1.00	
Frt		1.00						1.00			1.00	
Flt Protected		0.96						1.00			1.00	
Satd. Flow (prot)		1854						3355			3355	
Flt Permitted		0.96						1.00			1.00	
Satd. Flow (perm)		1854						3355			3355	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	11	5	0	0	0	0	2560	0	0	1935	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	155	0	0	0	0	0	2560	0	0	1935	0
Confl. Peds. (#/hr)								1				
Heavy Vehicles (%)	5%	88%	0%	2%	2%	2%	0%	4%	0%	0%	4%	0%
Turn Type	Perm	NA						NA			NA	
Protected Phases		2						1			1	
Permitted Phases	2											
Actuated Green, G (s)		12.6						48.1			48.1	
Effective Green, g (s)		12.6						48.1			48.1	
Actuated g/C Ratio		0.17						0.65			0.65	
Clearance Time (s)		6.0						7.0			7.0	
Vehicle Extension (s)		4.0						4.0			4.0	
Lane Grp Cap (vph)		316						2189			2189	
v/s Ratio Prot								0.76			0.58	
v/s Ratio Perm		0.08										
v/c Ratio		0.49						1.17			0.88	
Uniform Delay, d1		27.7						12.8			10.5	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		1.6						81.6			5.7	
Delay (s)		29.3						94.4			16.2	
Level of Service		C						F			B	
Approach Delay (s)		29.3			0.0			94.4			16.2	
Approach LOS		C			A			F			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			59.6									E
HCM 2000 Volume to Capacity ratio			1.03									
Actuated Cycle Length (s)			73.7						13.0			
Intersection Capacity Utilization			84.3%									E
Analysis Period (min)			15									
c Critical Lane Group												



	→	↘	↶	↙	←	↗	↘
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↓	↑↑↑		
Traffic Volume (vph)	1415	195	30	250	1460	0	0
Future Volume (vph)	1415	195	30	250	1460	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	9	11	12	12
Grade (%)	0%				0%	0%	
Storage Length (ft)		500		130		0	0
Storage Lanes		0		1		0	0
Taper Length (ft)				25		25	
Satd. Flow (prot)	4841	0	0	1499	4951	0	0
Flt Permitted				0.950			
Satd. Flow (perm)	4841	0	0	1497	4951	0	0
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	81						
Link Speed (mph)	30				30	30	
Link Distance (ft)	572				1857	345	
Travel Time (s)	13.0				42.2	7.8	
Confl. Peds. (#/hr)		8		8			
Confl. Bikes (#/hr)							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	4%	3%	9%	1%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	2	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%				0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1750	0	0	305	1587	0	0
Turn Type	NA		Prot	Prot	NA		
Protected Phases	2		1	1	1 2		
Permitted Phases							
Detector Phase	2		1	1	1 2		
Switch Phase							
Minimum Initial (s)	8.0		8.0	8.0			
Minimum Split (s)	13.0		13.0	13.0			
Total Split (s)	24.0		17.0	17.0			
Total Split (%)	58.5%		41.5%	41.5%			
Yellow Time (s)	3.5			3.5			
All-Red Time (s)	1.5		1.5	1.5			
Lost Time Adjust (s)	0.0			0.0			
Total Lost Time (s)	5.0			5.0			
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?							
Recall Mode	Min		None	None			
Act Effct Green (s)	19.0			11.8	40.8		
Actuated g/C Ratio	0.47			0.29	1.00		
v/c Ratio	0.76			0.70	0.32		
Control Delay	11.4			25.0	0.2		
Queue Delay	0.0			0.0	0.0		
Total Delay	11.4			25.0	0.2		
LOS	B			C	A		
Approach Delay	11.4				4.2		
Approach LOS	B				A		
Queue Length 50th (ft)	104			61	0		
Queue Length 95th (ft)	150			#153	0		
Internal Link Dist (ft)	492				1777	265	
Turn Bay Length (ft)				130			
Base Capacity (vph)	2296			440	4850		
Starvation Cap Reductn	0			0	0		
Spillback Cap Reductn	0			0	0		
Storage Cap Reductn	0			0	0		
Reduced v/c Ratio	0.76			0.69	0.33		

<b>Intersection Summary</b>	
Area Type:	Other
Cycle Length: 41	
Actuated Cycle Length: 40.8	
Natural Cycle: 40	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 7.6	Intersection LOS: A
Intersection Capacity Utilization 55.6%	ICU Level of Service B
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 11: Route 1A on-ramp & Route 145

 <b>01</b> 17 s	 <b>02</b> 24 s
---	---

	→	↘	↶	↙	←	↗	↘
Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↓	↑↑↑		
Traffic Volume (vph)	1415	195	30	250	1460	0	0
Future Volume (vph)	1415	195	30	250	1460	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	9	11	12	12
Total Lost time (s)	5.0			5.0	5.0		
Lane Util. Factor	0.91			1.00	0.91		
Frpb, ped/bikes	1.00			1.00	1.00		
Flpb, ped/bikes	1.00			1.00	1.00		
Frt	0.98			1.00	1.00		
Flt Protected	1.00			0.95	1.00		
Satd. Flow (prot)	4840			1499	4951		
Flt Permitted	1.00			0.95	1.00		
Satd. Flow (perm)	4840			1499	4951		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1538	212	33	272	1587	0	0
RTOR Reduction (vph)	43	0	0	0	0	0	0
Lane Group Flow (vph)	1707	0	0	305	1587	0	0
Confl. Peds. (#/hr)		8		8			
Heavy Vehicles (%)	1%	4%	3%	9%	1%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	2	0	0
Turn Type	NA		Prot	Prot	NA		
Protected Phases	2		1	1	1 2		
Permitted Phases							
Actuated Green, G (s)	19.0			11.8	40.8		
Effective Green, g (s)	19.0			11.8	40.8		
Actuated g/C Ratio	0.47			0.29	1.00		
Clearance Time (s)	5.0			5.0			
Vehicle Extension (s)	2.0			2.0			
Lane Grp Cap (vph)	2253			433	4951		
v/s Ratio Prot	c0.35			c0.20	0.32		
v/s Ratio Perm							
v/c Ratio	0.76			0.70	0.32		
Uniform Delay, d1	9.0			12.9	0.0		
Progression Factor	1.00			1.00	1.00		
Incremental Delay, d2	1.3			4.2	0.0		
Delay (s)	10.3			17.2	0.0		
Level of Service	B			B	A		
Approach Delay (s)	10.3				2.8	0.0	
Approach LOS	B				A	A	
Intersection Summary							
HCM 2000 Control Delay		6.4		HCM 2000 Level of Service		A	
HCM 2000 Volume to Capacity ratio		0.74					
Actuated Cycle Length (s)		40.8		Sum of lost time (s)		10.0	
Intersection Capacity Utilization		55.6%		ICU Level of Service		B	
Analysis Period (min)		15					

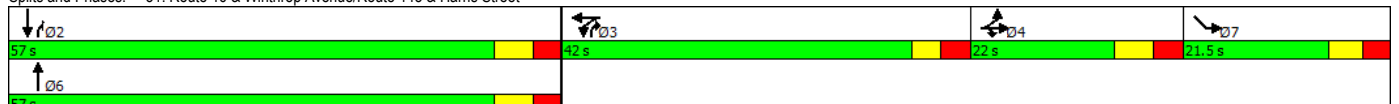
c Critical Lane Group























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SBR2	SEL	SER
Lane Configurations		↕↕	↗	↖↖	↖			↕↕	↗	↕↕			↖↖	
Traffic Volume (vph)	15	245	10	810	460	110	80	1055	1230	445	10	5	135	20
Future Volume (vph)	15	245	10	810	460	110	80	1055	1230	445	10	5	135	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	16	12	12	12	12	12	14	16	12	12	12	12
Grade (%)		0%			0%			0%		0%			0%	
Storage Length (ft)	50		0	0		0			0		0		0	0
Storage Lanes	1		1	2		0			1		0		1	0
Taper Length (ft)	25			25									25	
Satd. Flow (prot)	0	3328	1816	3502	1775	0	0	3574	1706	3951	0	0	1754	0
Flt Permitted		0.997		0.950									0.958	
Satd. Flow (perm)	0	3327	1816	3447	1775	0	0	3574	1706	3951	0	0	1754	0
Right Turn on Red			Yes				No		Yes			Yes		
Satd. Flow (RTOR)			126						100		1			
Link Speed (mph)		30			30			30		30			30	
Link Distance (ft)		485			572			480		673			302	
Travel Time (s)		11.0			13.0			10.9		15.3			6.9	
Confl. Peds. (#/hr)	4		7	7		2	4				1	2		7
Confl. Bikes (#/hr)							1							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	0%	0%	2%	1%	0%	1%	1%	3%	0%	0%	0%	11%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														1
Mid-Block Traffic (%)		0%			0%			0%		0%			0%	
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	282		880	707	0	0	1147	1337	500	0	0	169	0
Turn Type	Split	NA	Prot	Split	NA			NA	custom	NA			Prot	
Protected Phases	4	4	4	3	3			6	2 3	2			7	
Permitted Phases														
Detector Phase	4	4	4	3	3			6	2 3	2			7	
Switch Phase														
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0			8.0		8.0			8.0	
Minimum Split (s)	20.0	20.0	20.0	28.0	28.0			15.0		20.0			20.0	
Total Split (s)	22.0	22.0	22.0	42.0	42.0			57.0		57.0			21.5	
Total Split (%)	15.4%	15.4%	15.4%	29.5%	29.5%			40.0%		40.0%			15.1%	
Yellow Time (s)	4.0	4.0	4.0	3.0	3.0			4.0		4.0			3.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0			3.0		3.0			3.0	
Lost Time Adjust (s)		-1.0	-1.0	-1.0	-1.0			-1.0		-1.0			-1.0	
Total Lost Time (s)		6.0	6.0	5.0	5.0			6.0		6.0			5.5	
Lead/Lag	Lag	Lag	Lag	Lead	Lead									
Lead-Lag Optimize?														
Recall Mode	None	None	None	None	None			Min		Min			None	
Act Effct Green (s)		15.6	15.6	37.0	37.0			51.0	93.0	51.0			15.8	
Actuated g/C Ratio		0.11	0.11	0.26	0.26			0.36	0.66	0.36			0.11	
v/c Ratio		0.77	0.04	0.96	1.53			0.89	1.16	0.35			0.87	
Control Delay		76.4	0.2	73.8	284.8			52.9	105.4	34.2			99.8	
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0	0.0			0.0	
Total Delay		76.4	0.2	73.8	284.8			52.9	105.4	34.2			99.8	
LOS		E	A	E	F			D	F	C			F	
Approach Delay		73.6			167.8			81.2		34.2			99.8	
Approach LOS		E			F			F		C			F	
Queue Length 50th (ft)		135	0	419	~917			527	~1439	178			157	
Queue Length 95th (ft)		#191	0	#553	#1161			#630	#1708	228			#288	
Internal Link Dist (ft)		405			492			400		593			222	
Turn Bay Length (ft)														
Base Capacity (vph)		375	316	913	462			1285	1153	1421			197	
Starvation Cap Reductn		0	0	0	0			0	0	0			0	
Spillback Cap Reductn		0	0	0	0			0	0	0			0	
Storage Cap Reductn		0	0	0	0			0	0	0			0	
Reduced v/c Ratio		0.75	0.03	0.96	1.53			0.89	1.16	0.35			0.86	

#### Intersection Summary

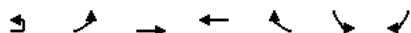
Area Type:	Other
Cycle Length: 142.5	
Actuated Cycle Length: 141.8	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.53	
Intersection Signal Delay: 104.0	Intersection LOS: F
Intersection Capacity Utilization 101.0%	ICU Level of Service G
Analysis Period (min) 15	
- Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 31: Route 16 & Winthrop Avenue/Route 145 & Harris Street



														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SBR2	SEL	SER
Lane Configurations														
Traffic Volume (vph)	15	245	10	810	460	110	80	1055	1230	445	10	5	135	20
Future Volume (vph)	15	245	10	810	460	110	80	1055	1230	445	10	5	135	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	16	12	12	12	12	12	14	16	12	12	12	12
Total Lost time (s)		6.0	6.0	5.0	5.0			6.0	6.0	6.0			5.5	
Lane Util. Factor		0.95	1.00	0.97	1.00			0.95	1.00	0.95			1.00	
Frpb, ped/bikes		1.00	1.00	1.00	0.99			1.00	1.00	1.00			1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00			1.00	1.00	1.00			1.00	
Frt		1.00	0.85	1.00	0.96			1.00	0.85	1.00			0.98	
Flt Protected		1.00	1.00	0.95	1.00			1.00	1.00	1.00			0.96	
Satd. Flow (prot)		3328	1816	3502	1776			3574	1706	3952			1756	
Flt Permitted		1.00	1.00	0.95	1.00			1.00	1.00	1.00			0.96	
Satd. Flow (perm)		3328	1816	3502	1776			3574	1706	3952			1756	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	266	11	880	500	120	87	1147	1337	484	11	5	147	22
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	34	1	0	0	0	0
Lane Group Flow (vph)	0	282	1	880	707	0	0	1147	1303	499	0	0	169	0
Confl. Peds. (#/hr)	4		7	7		2	4				1	2		7
Confl. Bikes (#/hr)							1							
Heavy Vehicles (%)	0%	1%	0%	0%	2%	1%	0%	1%	1%	3%	0%	0%	0%	11%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														1
Turn Type	Split	NA	Prot	Split	NA			NA	custom	NA			Prot	
Protected Phases	4	4	4	3	3			6	2 3	2			7	
Permitted Phases														
Actuated Green, G (s)		14.6	14.6	36.0	36.0			50.0	93.0	50.0			14.8	
Effective Green, g (s)		15.6	15.6	37.0	37.0			51.0	94.0	51.0			15.8	
Actuated g/C Ratio		0.11	0.11	0.26	0.26			0.36	0.66	0.36			0.11	
Clearance Time (s)		7.0	7.0	6.0	6.0			7.0		7.0			6.5	
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0		3.0			3.0	
Lane Grp Cap (vph)		365	199	913	463			1284	1130	1420			195	
v/s Ratio Prot		c0.08	0.00	0.25	c0.40			0.32	c0.76	0.13			c0.10	
v/s Ratio Perm														
v/c Ratio		0.77	0.01	0.96	1.53			0.89	1.15	0.35			0.87	
Uniform Delay, d1		61.4	56.2	51.8	52.5			42.9	24.0	33.3			62.0	
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00	1.00			1.00	
Incremental Delay, d2		9.8	0.0	21.3	247.9			8.3	79.4	0.2			30.8	
Delay (s)		71.2	56.3	73.1	300.4			51.1	103.4	33.5			92.8	
Level of Service		E	E	E	F			D	F	C			F	
Approach Delay (s)		70.6			174.3			79.2		33.5			92.8	
Approach LOS		E			F			E		C			F	
<b>Intersection Summary</b>														
HCM 2000 Control Delay			104.6		HCM 2000 Level of Service					F				
HCM 2000 Volume to Capacity ratio			1.21											
Actuated Cycle Length (s)			141.9		Sum of lost time (s)					22.5				
Intersection Capacity Utilization			101.0%		ICU Level of Service					G				
Analysis Period (min)			15											

c Critical Lane Group

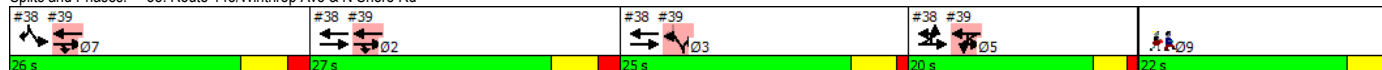


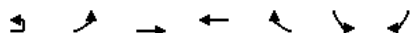
Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø3	Ø9
Lane Configurations		↔	↔↔↔	↔↔↔		↔	↔			
Traffic Volume (vph)	5	275	1370	1005	190	105	245			
Future Volume (vph)	5	275	1370	1005	190	105	245			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900			
Lane Width (ft)	12	11	11	11	12	15	12			
Grade (%)			0%	0%		0%				
Storage Length (ft)		120			0	0	150			
Storage Lanes		1			0	1	1			
Taper Length (ft)		25				25				
Satd. Flow (prot)	0	1728	4951	4853	0	1947	1509			
Flt Permitted		0.950				0.950				
Satd. Flow (perm)	0	1728	4951	4853	0	1947	1509			
Right Turn on Red					Yes		Yes			
Satd. Flow (RTOR)				38			266			
Link Speed (mph)			30	30		30				
Link Distance (ft)			1857	236		865				
Travel Time (s)			42.2	5.4		19.7				
Confl. Peds. (#/hr)										
Confl. Bikes (#/hr)										
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	100%	100%	100%	100%	100%	100%	100%			
Heavy Vehicles (%)	0%	1%	1%	1%	0%	2%	7%			
Bus Blockages (#/hr)	0	0	2	0	0	0	0			
Parking (#/hr)										
Mid-Block Traffic (%)			0%	0%		0%				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	304	1489	1299	0	114	266			
Turn Type	Prot	Prot	NA	NA		Prot	Prot			
Protected Phases	5	5	2 3 5	2 3		7	7	2	3	9
Permitted Phases										
Detector Phase	5	5	2 3 5	2 3		7	7			
Switch Phase										
Minimum Initial (s)	1.0	1.0				20.0	20.0	20.0	8.0	4.0
Minimum Split (s)	20.0	20.0				26.0	26.0	26.0	13.0	22.0
Total Split (s)	20.0	20.0				26.0	26.0	27.0	25.0	22.0
Total Split (%)	16.7%	16.7%				21.7%	21.7%	23%	21%	18%
Yellow Time (s)	3.0	3.0				4.0	4.0	4.0	4.0	3.5
All-Red Time (s)	1.0	1.0				2.0	2.0	2.0	1.0	0.5
Lost Time Adjust (s)		-1.0				-1.0	-1.0			
Total Lost Time (s)		3.0				5.0	5.0			
Lead/Lag	Lag	Lag				Lead	Lead	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes								
Recall Mode	None	None				Min	Min	Min	None	None
Act Effct Green (s)		17.2	68.7	48.5		21.2	21.2			
Actuated g/C Ratio		0.16	0.64	0.45		0.20	0.20			
v/c Ratio		1.10	0.47	0.58		0.30	0.52			
Control Delay		125.8	11.7	25.7		41.4	9.2			
Queue Delay		0.0	0.2	2.9		0.5	0.0			
Total Delay		125.8	11.9	28.6		42.0	9.2			
LOS		F	B	C		D	A			
Approach Delay			31.2	28.6		19.0				
Approach LOS			C	C		B				
Queue Length 50th (ft)		~196	130	210		60	0			
Queue Length 95th (ft)		#472	290	328		135	76			
Internal Link Dist (ft)			1777	156		785				
Turn Bay Length (ft)		120					150			
Base Capacity (vph)		277	3183	2223		386	512			
Starvation Cap Reductn		0	0	783		0	0			
Spillback Cap Reductn		0	731	0		88	0			
Storage Cap Reductn		0	0	0		0	0			
Reduced v/c Ratio		1.10	0.61	0.90		0.38	0.52			

#### Intersection Summary

Area Type: Other  
Cycle Length: 120  
Actuated Cycle Length: 106.8  
Natural Cycle: 150  
Control Type: Semi Act-Uncoord  
Maximum v/c Ratio: 1.61  
Intersection Signal Delay: 28.9  
Intersection Capacity Utilization 66.7%  
Analysis Period (min) 15  
- Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 38: Route 145/Winthrop Ave & N Shore Rd





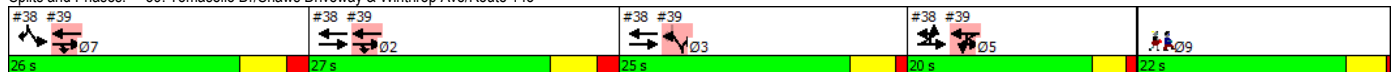
Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↩	↩↩↩	↩↩↩		↩	↩
Traffic Volume (vph)	5	275	1370	1005	190	105	245
Future Volume (vph)	5	275	1370	1005	190	105	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	11	12	15	12
Total Lost time (s)		3.0	4.0	4.0		5.0	5.0
Lane Util. Factor		1.00	0.91	0.91		1.00	1.00
Flt		1.00	1.00	0.98		1.00	0.85
Flt Protected		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)		1728	4951	4853		1947	1509
Flt Permitted		0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)		1728	4951	4853		1947	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	299	1489	1092	207	114	266
RTOR Reduction (vph)	0	0	0	21	0	0	214
Lane Group Flow (vph)	0	304	1489	1278	0	114	52
Heavy Vehicles (%)	0%	1%	1%	1%	0%	2%	7%
Bus Blockages (#/hr)	0	0	2	0	0	0	0
Turn Type	Prot	Prot	NA	NA		Prot	Prot
Protected Phases	5	5	2 3 5	2 3		7	7
Permitted Phases							
Actuated Green, G (s)		16.2	68.6	47.4		20.2	20.2
Effective Green, g (s)		17.2	67.6	49.4		21.2	21.2
Actuated g/C Ratio		0.16	0.62	0.45		0.19	0.19
Clearance Time (s)		4.0				6.0	6.0
Vehicle Extension (s)		3.0				4.0	4.0
Lane Grp Cap (vph)		272	3064	2195		377	292
v/s Ratio Prot		c0.18	0.30	c0.26		c0.06	0.03
v/s Ratio Perm							
v/c Ratio		1.12	0.49	0.58		0.30	0.18
Uniform Delay, d1		46.0	11.3	22.2		37.7	36.7
Progression Factor		1.00	1.00	1.09		1.00	1.00
Incremental Delay, d2		89.9	0.2	0.4		0.6	0.4
Delay (s)		135.9	11.5	24.7		38.3	37.1
Level of Service		F	B	C		D	D
Approach Delay (s)			32.6	24.7		37.5	
Approach LOS			C	C		D	
<b>Intersection Summary</b>							
HCM 2000 Control Delay			30.2		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio			0.61				
Actuated Cycle Length (s)			109.2		Sum of lost time (s)		20.0
Intersection Capacity Utilization			66.7%		ICU Level of Service		C
Analysis Period (min)			15				
c Critical Lane Group							














Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø2	Ø7	Ø9
Lane Configurations		↑↑	↑		↓	↑↑	↓	↑↑		↑			↑			
Traffic Volume (vph)	0	1250	225	5	155	945	5	245	0	470	0	0	5			
Future Volume (vph)	0	1250	225	5	155	945	5	245	0	470	0	0	5			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Lane Width (ft)	12	11	11	12	9	11	12	10	12	12	12	12	16			
Grade (%)		0%				0%			0%			0%				
Storage Length (ft)	0		0		100		0	0		100	0		0			
Storage Lanes	0		1		1		0	1		1	0		1			
Taper Length (ft)	25				25			25			25					
Satd. Flow (prot)	0	3455	1546	0	1624	4947	0	3236	0	1599	0	0	1826			
Flt Permitted					0.950			0.950								
Satd. Flow (perm)	0	3455	1546	0	1624	4947	0	3236	0	1599	0	0	1826			
Right Turn on Red			No				Yes			No			No			
Satd. Flow (RTOR)						1										
Link Speed (mph)		30				30			30			30				
Link Distance (ft)		236				635			1415			589				
Travel Time (s)		5.4				14.4			32.2			13.4				
Confl. Peds. (#/hr)	3															
Confl. Bikes (#/hr)																
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Heavy Vehicles (%)	0%	1%	1%	0%	0%	1%	0%	1%	0%	1%	2%	2%	2%			
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0	0			
Parking (#/hr)																
Mid-Block Traffic (%)		0%				0%			0%			0%				
Shared Lane Traffic (%)																
Lane Group Flow (vph)	0	1359	245	0	173	1032	0	266	0	511	0	0	5			
Turn Type		NA	Prot	Prot	Prot	NA		Prot		Prot			Perm			
Protected Phases		2 7	2 7	5	5	2 5 7		3		3				2	7	9
Permitted Phases													3			
Detector Phase		2 7	2 7	5	5	2 5 7		3		3			3			
Switch Phase																
Minimum Initial (s)				1.0	1.0			8.0		8.0			8.0	20.0	20.0	4.0
Minimum Split (s)				20.0	20.0			13.0		13.0			13.0	26.0	26.0	22.0
Total Split (s)				20.0	20.0			25.0		25.0			25.0	27.0	26.0	22.0
Total Split (%)				16.7%	16.7%			20.8%		20.8%			20.8%	23%	22%	18%
Yellow Time (s)				3.0	3.0			4.0		4.0			4.0	4.0	4.0	3.5
All-Red Time (s)				1.0	1.0			1.0		1.0			1.0	2.0	2.0	0.5
Lost Time Adjust (s)					-1.0			-1.0		-1.0			-1.0			
Total Lost Time (s)					3.0			4.0		4.0			4.0			
Lead/Lag				Lag	Lag			Lead		Lead			Lead	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes											
Recall Mode				None	None			None		None			None	Min	Min	None
Act Effct Green (s)		49.5	47.5		17.2	68.3		21.2		21.2			21.2			
Actuated g/C Ratio		0.46	0.44		0.16	0.64		0.20		0.20			0.20			
v/c Ratio		0.85	0.36		0.66	0.33		0.41		1.61			0.01			
Control Delay		33.2	26.4		57.7	7.0		41.5		320.4			39.8			
Queue Delay		48.1	4.2		0.0	0.2		0.0		0.0			0.0			
Total Delay		81.2	30.7		57.7	7.1		41.5		320.4			39.8			
LOS		F	C		E	A		D		F			D			
Approach Delay		73.5				14.4		224.9				39.8				
Approach LOS		E				B		F				D				
Queue Length 50th (ft)		263	83			76		73		~444			3			
Queue Length 95th (ft)		#659	180			#239		91		139			#813			
Internal Link Dist (ft)		156				555				1335			509			
Turn Bay Length (ft)					100					100						
Base Capacity (vph)		1600	687		261	3162		642		317			362			
Starvation Cap Reductn		509	359		0	0		0		0			0			
Spillback Cap Reductn		0	0		0	1038		0		0			0			
Storage Cap Reductn		0	0		0	0		0		0			0			
Reduced v/c Ratio		1.25	0.75		0.66	0.49		0.41		1.61			0.01			

#### Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	106.8
Natural Cycle:	150
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	1.61
Intersection Signal Delay:	86.4
Intersection LOS:	F
Intersection Capacity Utilization:	82.5%
ICU Level of Service:	E
Analysis Period (min):	15
-	Volume exceeds capacity, queue is theoretically infinite.
	Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer.
	Queue shown is maximum after two cycles.











Splits and Phases: 39: Tomasello Dr/Shaws Driveway & Winthrop Ave/Route 145



													
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↓	↓↓↓	↓	↓↓		↑			↑
Traffic Volume (vph)	0	1250	225	5	155	945	5	245	0	470	0	0	5
Future Volume (vph)	0	1250	225	5	155	945	5	245	0	470	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	12	9	11	12	10	12	12	12	12	16
Total Lost time (s)		4.0	6.0		3.0	4.0		4.0		4.0			4.0
Lane Util. Factor		0.95	1.00		1.00	0.91		0.97		1.00			1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00			1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00			1.00
Frt		1.00	0.85		1.00	1.00		1.00		0.85			0.86
Flt Protected		1.00	1.00		0.95	1.00		0.95		1.00			1.00
Satd. Flow (prot)		3455	1546		1624	4948		3236		1599			1826
Flt Permitted		1.00	1.00		0.95	1.00		0.95		1.00			1.00
Satd. Flow (perm)		3455	1546		1624	4948		3236		1599			1826
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1359	245	5	168	1027	5	266	0	511	0	0	5
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1359	245	0	173	1032	0	266	0	511	0	0	5
Confl. Peds. (#/hr)	3												
Heavy Vehicles (%)	0%	1%	1%	0%	0%	1%	0%	1%	0%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0	0
Turn Type	NA	Prot	Prot	Prot	NA		Prot		Prot				Perm
Protected Phases	2 7	2 7	5	5	2 5 7		3		3				
Permitted Phases													3
Actuated Green, G (s)		47.4	47.4		16.2	63.6		20.2		20.2			20.2
Effective Green, g (s)		49.4	47.4		17.2	67.6		21.2		21.2			21.2
Actuated g/C Ratio		0.45	0.43		0.16	0.62		0.19		0.19			0.19
Clearance Time (s)					4.0			5.0		5.0			5.0
Vehicle Extension (s)					3.0			4.0		4.0			4.0
Lane Grp Cap (vph)		1562	671		255	3063		628		310			354
v/s Ratio Prot		c0.39	0.16		c0.11	0.21		0.08		c0.32			
v/s Ratio Perm													0.00
v/c Ratio		0.87	0.37		0.68	0.34		0.42		1.65			0.01
Uniform Delay, d1		27.0	20.8		43.4	10.0		38.6		44.0			35.6
Progression Factor		1.01	1.14		1.00	1.00		1.00		1.00			1.00
Incremental Delay, d2		5.2	0.4		7.0	0.1		0.6		305.9			0.0
Delay (s)		32.6	24.0		50.4	10.1		39.3		349.9			35.6
Level of Service		C	C		D	B		D		F			D
Approach Delay (s)		31.3				15.9			243.5			35.6	
Approach LOS		C				B			F			D	
<b>Intersection Summary</b>													
HCM 2000 Control Delay			72.0			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio			1.05										
Actuated Cycle Length (s)			109.2			Sum of lost time (s)			24.0				
Intersection Capacity Utilization			82.5%			ICU Level of Service			E				
Analysis Period (min)			15										

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø2
Lane Configurations													
Traffic Volume (vph)	70	230	15	300	180	210	35	300	605	125	240	80	
Future Volume (vph)	70	230	15	300	180	210	35	300	605	125	240	80	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	10	16	12	10	12	12	10	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		150	250		305	0		0	0		0	
Storage Lanes	0		0	1		0			1	1		0	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1437	0	1484	1409	1569	0	1530	1275	1624	1481	0	
Flt Permitted		0.843		0.950	0.987			0.927		0.281			
Satd. Flow (perm)	0	1192	0	1460	1403	1569	0	1413	1275	462	1481	0	
Right Turn on Red			Yes			Yes			No			Yes	
Satd. Flow (RTOR)		2				228					11		
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		1166			677			476			1736		
Travel Time (s)		26.5			15.4			10.8			39.5		
Confl. Peds. (#/hr)	92		18	18		92	69		48	48		69	
Confl. Bikes (#/hr)			1						1				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	7%	4%	1%	4%	7%	5%	2%	4%	2%	0%	0%	0%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)	1	1	1						1			1	
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)				21%									
Lane Group Flow (vph)	0	342	0	258	264	228	0	364	658	136	348	0	
Turn Type	Perm	NA		Split	NA	Prot	Perm	NA	pt+ov	D.P+P	NA		
Protected Phases		5		1	1	1		7	17	6	67		2
Permitted Phases	5						7			7			
Detector Phase	5	5		1	1	1	7	7	17	6	67		
Switch Phase													
Minimum Initial (s)	8.0	8.0		8.0	8.0	8.0	8.0	8.0		4.0			1.0
Minimum Split (s)	37.0	37.0		30.0	30.0	30.0	13.0	13.0		8.0			26.0
Total Split (s)	41.0	41.0		32.0	32.0	32.0	37.0	37.0		10.0			30.0
Total Split (%)	27.3%	27.3%		21.3%	21.3%	21.3%	24.7%	24.7%		6.7%			20%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0			3.0
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	2.0	2.0		1.0			1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		0.0		0.0			
Total Lost Time (s)		6.0		6.0	6.0	6.0		5.0		4.0			
Lead/Lag	Lead	Lead		Lead	Lead	Lead				Lag			Lag
Lead-Lag Optimize?													
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None			None
Act Effct Green (s)		35.0		26.0	26.0	26.0		46.4	77.4	53.4	57.4		
Actuated g/C Ratio		0.23		0.17	0.17	0.17		0.31	0.52	0.36	0.38		
v/c Ratio		1.23		1.00	1.08	0.50		0.83	1.00	0.65	0.61		
Control Delay		175.9		117.7	137.5	10.2		66.6	72.1	54.0	44.6		
Queue Delay		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total Delay		175.9		117.7	137.5	10.2		66.6	72.1	54.0	44.6		
LOS		F		F	F	B		E	E	D	D		
Approach Delay		175.9			92.0			70.2			47.2		
Approach LOS		F			F			E			D		
Queue Length 50th (ft)		~410		~270	~303	0		~394	~757	100	296		
Queue Length 95th (ft)		#616		#468	#498	77		#601	#1003	#192	421		
Internal Link Dist (ft)		1086			597			396			1656		
Turn Bay Length (ft)				250		305							
Base Capacity (vph)		279		257	244	460		437	657	210	573		
Starvation Cap Reductn		0		0	0	0		0	0	0	0		
Spillback Cap Reductn		0		0	0	0		0	0	0	0		
Storage Cap Reductn		0		0	0	0		0	0	0	0		
Reduced v/c Ratio		1.23		1.00	1.08	0.50		0.83	1.00	0.65	0.61		





















#### Intersection Summary

Area Type: CBD  
Cycle Length: 150  
Actuated Cycle Length: 150  
Offset: 0 (0%), Referenced to phase 7:NBSB, Start of Green  
Natural Cycle: 145  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 1.23  
Intersection Signal Delay: 86.1  
Intersection Capacity Utilization 105.3%  
Analysis Period (min) 15  
- Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Intersection LOS: F  
ICU Level of Service G

Splits and Phases: 44: Bennington Street & Saratoga Street/Saratoga



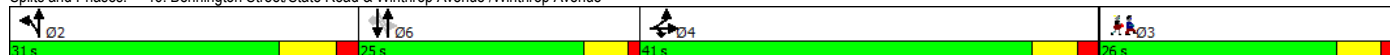
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	230	15	300	180	210	35	300	605	125	240	80
Future Volume (vph)	70	230	15	300	180	210	35	300	605	125	240	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	16	12	10	12	12	10	12
Total Lost time (s)		6.0		6.0	6.0	6.0		5.0	6.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00		1.00	1.00	1.00		1.00	1.00	1.00	0.97	
Flpb, ped/bikes		0.97		1.00	1.00	1.00		0.99	1.00	0.99	1.00	
Frt		0.99		1.00	1.00	0.85		1.00	0.85	1.00	0.96	
Flt Protected		0.99		0.95	0.99	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)		1398		1484	1409	1569		1519	1275	1611	1493	
Flt Permitted		0.84		0.95	0.99	1.00		0.93	1.00	0.28	1.00	
Satd. Flow (perm)		1191		1484	1409	1569		1415	1275	477	1493	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	250	16	326	196	228	38	326	658	136	261	87
RTOR Reduction (vph)	0	2	0	0	0	188	0	0	0	0	7	0
Lane Group Flow (vph)	0	340	0	258	264	40	0	364	658	136	341	0
Confl. Peds. (#/hr)	92		18	18		92	69		48	48		69
Confl. Bikes (#/hr)			1						1			
Heavy Vehicles (%)	7%	4%	1%	4%	7%	5%	2%	4%	2%	0%	0%	0%
Parking (#/hr)	1	1	1						1			1
Turn Type	Perm	NA		Split	NA	Prot	Perm	NA	pt+ov	D,P+P	NA	
Protected Phases		5		1	1	1		7	1 7	6	6 7	
Permitted Phases	5						7			7		
Actuated Green, G (s)		35.0		26.0	26.0	26.0		44.8	75.8	50.8	54.8	
Effective Green, g (s)		35.0		26.0	26.0	26.0		44.8	70.8	50.8	54.8	
Actuated g/C Ratio		0.23		0.17	0.17	0.17		0.30	0.47	0.34	0.37	
Clearance Time (s)		6.0		6.0	6.0	6.0		5.0		4.0		
Vehicle Extension (s)		4.0		4.0	4.0	4.0		4.0		2.0		
Lane Grp Cap (vph)		277		257	244	271		422	601	206	545	
v/s Ratio Prot				0.17	0.19	0.03			c0.52	0.03	c0.23	
v/s Ratio Perm		c0.29						0.26		0.20		
v/c Ratio		1.23		1.00	1.08	0.15		0.86	1.09	0.66	0.63	
Uniform Delay, d1		57.5		62.0	62.0	52.6		49.7	39.6	43.8	39.2	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		130.6		57.1	81.1	1.1		20.2	65.3	6.0	1.6	
Delay (s)		188.1		119.1	143.1	53.7		69.9	104.9	49.8	40.8	
Level of Service		F		F	F	D		E	F	D	D	
Approach Delay (s)		188.1			107.7			92.4			43.3	
Approach LOS		F			F			F			D	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			100.3									F
HCM 2000 Volume to Capacity ratio			1.00									
Actuated Cycle Length (s)			150.0							25.0		
Intersection Capacity Utilization			105.3%									G
Analysis Period (min)			15									
c Critical Lane Group												



















Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations		↔	↔				↔	↔			↔	↔	
Traffic Volume (vph)	75	265	245	0	0	0	355	355	85	35	185	135	
Future Volume (vph)	75	265	245	0	0	0	355	355	85	35	185	135	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	10	12	12	12	10	11	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		50	0		0	0		0	0		0	
Storage Lanes	0		1	0		0	1		0	0		1	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1665	1319	0	0	0	1501	1599	0	0	1668	1253	
Flt Permitted		0.989					0.271				0.868		
Satd. Flow (perm)	0	1665	1319	0	0	0	428	1599	0	0	1460	1236	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			124					12				147	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		988			531			233			338		
Travel Time (s)		22.5			12.1			5.3			7.7		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)									1			1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	0%	2%	2%	2%	2%	2%	1%	0%	0%	0%	2%	3%	
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	2	
Parking (#/hr)									1			1	
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	370	266	0	0	0	386	478	0	0	239	147	
Turn Type	Split	NA	Prot				D.P+P	NA		Perm	NA	Perm	
Protected Phases	4	4	4				2	2 6			6		3
Permitted Phases							6			6		6	
Detector Phase	4	4	4				2	2 6		6	6	6	
Switch Phase													
Minimum Initial (s)	5.0	5.0	5.0				5.0			5.0	5.0	5.0	1.0
Minimum Split (s)	11.0	11.0	11.0				12.0			10.0	10.0	10.0	26.0
Total Split (s)	41.0	41.0	41.0				31.0			25.0	25.0	25.0	26.0
Total Split (%)	33.3%	33.3%	33.3%				25.2%			20.3%	20.3%	20.3%	21%
Yellow Time (s)	4.0	4.0	4.0				5.0			4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0				2.0			1.0	1.0	1.0	1.0
Lost Time Adjust (s)		-2.0	-2.0				-1.0				-2.0	0.0	
Total Lost Time (s)		4.0	4.0				6.0				3.0	5.0	
Lead/Lag							Lead			Lag	Lag	Lag	
Lead-Lag Optimize?													
Recall Mode	None	None	None				Min			Max	Max	Max	None
Act Effct Green (s)		31.7	31.7				44.1	50.1			22.1	20.0	
Actuated g/C Ratio		0.27	0.27				0.37	0.42			0.19	0.17	
v/c Ratio		0.83	0.60				0.99	0.70			0.88	0.44	
Control Delay		56.7	25.1				76.8	34.5			78.5	11.7	
Queue Delay		0.0	0.0				0.0	0.0			0.0	0.0	
Total Delay		56.7	25.1				76.8	34.5			78.5	11.7	
LOS		E	C				E	C			E	B	
Approach Delay		43.5						53.4			53.1		
Approach LOS		D						D			D		
Queue Length 50th (ft)		264	92				~253	297			183	0	
Queue Length 95th (ft)		382	183				#475	444			#345	61	
Internal Link Dist (ft)		908			451			153			258		
Turn Bay Length (ft)			50										
Base Capacity (vph)		523	499				388	686			273	332	
Starvation Cap Reductn		0	0				0	0			0	0	
Spillback Cap Reductn		0	0				0	0			0	0	
Storage Cap Reductn		0	0				0	0			0	0	
Reduced v/c Ratio		0.71	0.53				0.99	0.70			0.88	0.44	












#### Intersection Summary

Area Type:	CBD
Cycle Length:	123
Actuated Cycle Length:	117.9
Natural Cycle:	90
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.99
Intersection Signal Delay:	50.0
Intersection Capacity Utilization	71.2%
Analysis Period (min)	15
Intersection LOS:	D
ICU Level of Service	C
- Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 46: Bennington Street/State Road & Winthrop Avenue /Winthrop Avenue



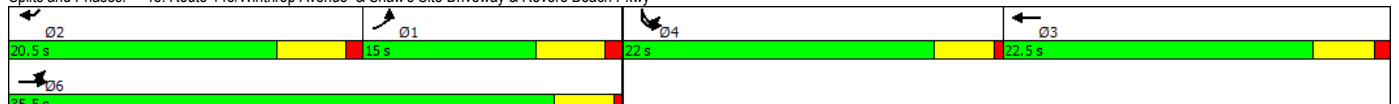
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	265	245	0	0	0	355	355	85	35	185	135
Future Volume (vph)	75	265	245	0	0	0	355	355	85	35	185	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	10	12	12	12	10	11	12	12	12	12
Total Lost time (s)		4.0	4.0				6.0	6.0			3.0	5.0
Lane Util. Factor		1.00	1.00				1.00	1.00			1.00	1.00
Frpb, ped/bikes		1.00	1.00				1.00	1.00			1.00	0.99
Flpb, ped/bikes		1.00	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.85				1.00	0.97			1.00	0.85
Flt Protected		0.99	1.00				0.95	1.00			0.99	1.00
Satd. Flow (prot)		1665	1319				1501	1599			1668	1236
Flt Permitted		0.99	1.00				0.27	1.00			0.87	1.00
Satd. Flow (perm)		1665	1319				428	1599			1459	1236
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	82	288	266	0	0	0	386	386	92	38	201	147
RTOR Reduction (vph)	0	0	91	0	0	0	0	7	0	0	0	122
Lane Group Flow (vph)	0	370	175	0	0	0	386	471	0	0	239	25
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	0%	2%	2%	2%	2%	2%	1%	0%	0%	0%	2%	3%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	2
Parking (#/hr)									1			1
Turn Type	Split	NA	Prot				D.P+P	NA		Perm	NA	Perm
Protected Phases	4	4	4				2	2 6			6	
Permitted Phases							6			6		6
Actuated Green, G (s)		29.7	29.7				44.1	51.1			20.0	20.0
Effective Green, g (s)		31.7	31.7				46.1	52.1			22.0	20.0
Actuated g/C Ratio		0.27	0.27				0.39	0.44			0.19	0.17
Clearance Time (s)		6.0	6.0				7.0				5.0	5.0
Vehicle Extension (s)		3.0	3.0				3.0				3.0	3.0
Lane Grp Cap (vph)		448	354				396	707			272	209
v/s Ratio Prot		c0.22	0.13				c0.21	0.29				
v/s Ratio Perm							c0.17				0.16	0.02
v/c Ratio		0.83	0.50				0.97	0.67			0.88	0.12
Uniform Delay, d1		40.5	36.3				30.3	26.0			46.6	41.4
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		11.8	1.1				38.3	2.4			30.7	1.2
Delay (s)		52.3	37.4				68.6	28.4			77.3	42.6
Level of Service		D	D				E	C			E	D
Approach Delay (s)		46.0			0.0			46.3			64.1	
Approach LOS		D			A			D			E	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			49.9				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.72									
Actuated Cycle Length (s)			117.8				Sum of lost time (s)			19.0		
Intersection Capacity Utilization			71.2%				ICU Level of Service			C		
Analysis Period (min)			15									
c Critical Lane Group												


















Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL2	SBL	SBR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (vph)	35	1015	675	645	10	25	10	10	20	0	445	15
Future Volume (vph)	35	1015	675	645	10	25	10	10	20	0	445	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%	0%				0%		0%		
Storage Length (ft)		0			0			0	0	0	0	
Storage Lanes		2			0			1	0	0	3	
Taper Length (ft)		25						25		25		
Satd. Flow (prot)	0	3433	1863	3506	0	0	0	1694	0	0	3610	0
Flt Permitted		0.933						0.976				
Satd. Flow (perm)	0	3343	1863	3506	0	0	0	1694	0	0	3610	0
Right Turn on Red						Yes			Yes			Yes
Satd. Flow (RTOR)				4				157			143	
Link Speed (mph)			30	30				30		30		
Link Distance (ft)			635	988				300		1471		
Travel Time (s)			14.4	22.5				6.8		33.4		
Confl. Peds. (#/hr)		13				13				1		
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%	0%				0%		0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1141	734	739	0	0	0	44	0	0	500	0
Turn Type	Prot	Split	NA	NA			Prot	Prot			Prot	
Protected Phases	1	6	6	3			4	4			2	
Permitted Phases												
Detector Phase	1	6	6	3			4	4			2	
Switch Phase												
Minimum Initial (s)	10.0	4.0	4.0	10.0			4.0	4.0			10.0	
Minimum Split (s)	15.0	20.0	20.0	22.5			22.0	22.0			15.0	
Total Split (s)	15.0	35.5	35.5	22.5			22.0	22.0			20.5	
Total Split (%)	18.8%	44.4%	44.4%	28.1%			27.5%	27.5%			25.6%	
Yellow Time (s)	4.0	3.5	3.5	3.5			3.5	3.5			4.0	
All-Red Time (s)	1.0	0.5	0.5	1.0			0.5	0.5			1.0	
Lost Time Adjust (s)		0.0	0.0	0.0				0.0			0.0	
Total Lost Time (s)		4.0	4.0	4.5				4.0			5.0	
Lead/Lag	Lag			Lag			Lead	Lead			Lead	
Lead-Lag Optimize?							Yes	Yes				
Recall Mode	Min	None	None	None			None	None			Min	
Act Effct Green (s)		31.7	31.7	17.9				5.5			15.0	
Actuated g/C Ratio		0.50	0.50	0.28				0.09			0.24	
v/c Ratio		1.02	0.79	0.75				0.15			0.52	
Control Delay		55.5	22.7	27.3				1.1			17.6	
Queue Delay		0.0	0.0	0.0				0.0			0.0	
Total Delay		55.5	22.7	27.3				1.1			17.6	
LOS		E	C	C				A			B	
Approach Delay			42.7	27.3				1.1		17.6		
Approach LOS			D	C				A		B		
Queue Length 50th (ft)		~218	253	147				0			55	
Queue Length 95th (ft)		#399	#457	#216				0			92	
Internal Link Dist (ft)			555	908				220		1391		
Turn Bay Length (ft)												
Base Capacity (vph)		1118	930	1002				595			995	
Starvation Cap Reductn		0	0	0				0			0	
Spillback Cap Reductn		0	0	0				0			0	
Storage Cap Reductn		0	0	0				0			0	
Reduced v/c Ratio		1.02	0.79	0.74				0.07			0.50	

#### Intersection Summary

Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 63.5	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 34.5	Intersection LOS: C
Intersection Capacity Utilization 70.9%	ICU Level of Service C
Analysis Period (min) 15	
- Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 48: Route 145/Winthrop Avenue & Shaw's Site Driveway & Revere Beach Pkwy



												
Movement	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL2	SBL	SBR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (vph)	35	1015	675	645	10	25	10	10	20	0	445	15
Future Volume (vph)	35	1015	675	645	10	25	10	10	20	0	445	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.5				4.0			5.0	
Lane Util. Factor		0.97	1.00	0.95				1.00			0.76	
Frpb, ped/bikes		1.00	1.00	1.00				1.00			1.00	
Flpb, ped/bikes		0.99	1.00	1.00				1.00			1.00	
Frt		1.00	1.00	0.99				0.93			0.85	
Flt Protected		0.95	1.00	1.00				0.98			1.00	
Satd. Flow (prot)		3409	1863	3507				1695			3610	
Flt Permitted		0.93	1.00	1.00				0.98			1.00	
Satd. Flow (perm)		3349	1863	3507				1695			3610	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	1103	734	701	11	27	11	11	22	0	484	16
RTOR Reduction (vph)	0	0	0	3	0	0	0	42	0	0	110	0
Lane Group Flow (vph)	0	1141	734	736	0	0	0	2	0	0	390	0
Confl. Peds. (#/hr)		13				13				1		
Turn Type	Prot	Split	NA	NA			Prot	Prot			Prot	
Protected Phases	1	6	6	3			4	4			2	
Permitted Phases												
Actuated Green, G (s)		31.7	31.7	17.9				3.1			15.0	
Effective Green, g (s)		31.7	31.7	17.9				3.1			15.0	
Actuated g/C Ratio		0.49	0.49	0.27				0.05			0.23	
Clearance Time (s)		4.0	4.0	4.5				4.0			5.0	
Vehicle Extension (s)		3.0	3.0	4.0				3.0			7.0	
Lane Grp Cap (vph)		1638	905	962				80			830	
v/s Ratio Prot		0.11	c0.39	c0.21				c0.00			0.11	
v/s Ratio Perm		0.22										
v/c Ratio		0.70	0.81	0.77				0.03			0.47	
Uniform Delay, d1		14.0	14.2	21.7				29.6			21.7	
Progression Factor		1.00	1.00	1.00				1.00			1.00	
Incremental Delay, d2		1.3	5.6	3.9				0.1			1.5	
Delay (s)		15.3	19.8	25.6				29.7			23.2	
Level of Service		B	B	C				C			C	
Approach Delay (s)			17.0	25.6				29.7		23.2		
Approach LOS			B	C				C		C		
<b>Intersection Summary</b>												
HCM 2000 Control Delay			20.2		HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			65.2		Sum of lost time (s)				18.5			
Intersection Capacity Utilization			70.9%		ICU Level of Service				C			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings  
12: Route 60

11/27/2017

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø2	Ø3	Ø4
Lane Configurations					↕↕	↗		↕↕			↕↕	↗				
Traffic Volume (vph)	0	0	0	0	1210	355	0	975	0	0	850	295				
Future Volume (vph)	0	0	0	0	1210	355	0	975	0	0	850	295				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Satd. Flow (prot)	0	0	0	0	3539	1583	0	3438	0	0	3374	1583				
Flt Permitted																
Satd. Flow (perm)	0	0	0	0	3539	1583	0	3438	0	0	3374	1583				
Right Turn on Red			Yes			Yes			Yes			Yes				
Satd. Flow (RTOR)						105						305				
Link Speed (mph)		30			30			30			30					
Link Distance (ft)		244			245			403			338					
Travel Time (s)		5.5			5.6			9.2			7.7					
Confl. Peds. (#/hr)						21										
Confl. Bikes (#/hr)						1										
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92				
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	7%	2%				
Shared Lane Traffic (%)																
Lane Group Flow (vph)	0	0	0	0	1315	386	0	1060	0	0	924	321				
Turn Type					NA	Prot		NA			NA	Prot				
Protected Phases					4 5 6 8	4 5 6 8		1 2 3			1 2	1 2	1	2	3	4
Permitted Phases																
Minimum Split (s)													10.0	19.0	16.0	16.0
Total Split (s)													35.0	14.0	16.0	16.0
Total Split (%)													31%	12%	14%	14%
Yellow Time (s)													4.0	4.0	3.0	3.0
All-Red Time (s)													1.0	1.0	1.0	1.0
Lost Time Adjust (s)																
Total Lost Time (s)																
Lead/Lag													Lead	Lag		Lead
Lead-Lag Optimize?																
Act Effct Green (s)					45.0	45.0		60.0			44.0	44.0				
Actuated g/C Ratio					0.39	0.39		0.53			0.39	0.39				
v/c Ratio					0.94	0.56		0.59			0.71	0.40				
Control Delay					48.1	24.4		0.8			33.3	4.9				
Queue Delay					46.1	28.3		0.2			0.0	0.0				
Total Delay					94.3	52.7		1.1			33.3	4.9				
LOS					F	D		A			C	A				
Approach Delay					84.8			1.1			26.0					
Approach LOS					F			A			C					
Queue Length 50th (ft)					521	151		0			297	7				
Queue Length 95th (ft)					m#613	m191		0			374	65				
Internal Link Dist (ft)		164			165			323			258					
Turn Bay Length (ft)																
Base Capacity (vph)					1396	688		1809			1302	798				
Starvation Cap Reductn					577	308		205			0	0				
Spillback Cap Reductn					0	0		0			0	0				
Storage Cap Reductn					0	0		0			0	0				
Reduced v/c Ratio					1.61	1.02		0.66			0.71	0.40				

Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.27

Intersection Signal Delay: 44.4

Intersection LOS: D

Intersection Capacity Utilization 67.9%

ICU Level of Service C

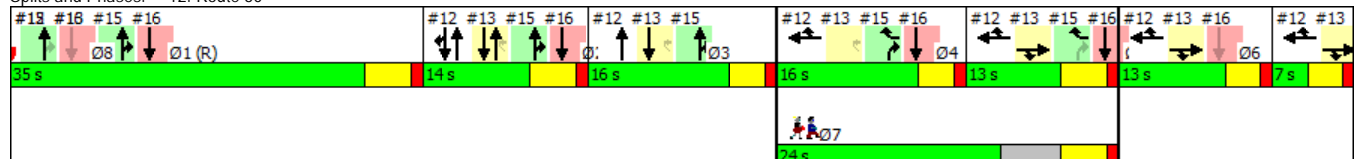
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: Route 60




















Lane Group	Ø5	Ø6	Ø7	Ø8
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	5	6	7	8
Permitted Phases				
Minimum Split (s)	13.0	13.0	24.0	9.0
Total Split (s)	13.0	13.0	24.0	7.0
Total Split (%)	11%	11%	21%	6%
Yellow Time (s)	4.0	3.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead		Lag
Lead-Lag Optimize?				
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				
Intersection Summary				



HCM Signalized Intersection Capacity Analysis  
12: Route 60

11/27/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1210	355	0	975	0	0	850	295
Future Volume (vph)	0	0	0	0	1210	355	0	975	0	0	850	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		5.0			5.0	5.0
Lane Util. Factor					0.95	1.00		0.95			0.95	1.00
Frbp, ped/bikes					1.00	1.00		1.00			1.00	1.00
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					3539	1583		3438			3374	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					3539	1583		3438			3374	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1315	386	0	1060	0	0	924	321
RTOR Reduction (vph)	0	0	0	0	0	68	0	0	0	0	0	187
Lane Group Flow (vph)	0	0	0	0	1315	318	0	1060	0	0	924	134
Confl. Peds. (#/hr)					21							
Confl. Bikes (#/hr)					1							
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	7%	2%
Turn Type					NA	Prot		NA			NA	Prot
Protected Phases					4 5 6 8	4 5 6 8		1 2 3			1 2	1 2
Permitted Phases												
Actuated Green, G (s)					45.0	45.0		61.0			44.0	44.0
Effective Green, g (s)					40.0	40.0		61.0			44.0	44.0
Actuated g/C Ratio					0.35	0.35		0.54			0.39	0.39
Clearance Time (s)												
Lane Grp Cap (vph)					1241	555		1839			1302	610
v/s Ratio Prot					c0.37	0.20		c0.31			c0.27	0.08
v/s Ratio Perm												
v/c Ratio					1.06	0.57		0.58			0.71	0.22
Uniform Delay, d1					37.0	30.1		17.8			29.6	23.5
Progression Factor					1.12	1.14		0.00			1.00	1.00
Incremental Delay, d2					39.2	3.0		0.8			3.3	0.8
Delay (s)					80.8	37.3		0.8			32.9	24.3
Level of Service					F	D		A			C	C
Approach Delay (s)		0.0			70.9			0.8			30.7	
Approach LOS		A			E			A			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			39.8		HCM 2000 Level of Service						D	
HCM 2000 Volume to Capacity ratio			0.99									
Actuated Cycle Length (s)			114.0		Sum of lost time (s)					31.0		
Intersection Capacity Utilization			67.9%		ICU Level of Service					C		
Analysis Period (min)			15									

c Critical Lane Group

Lanes, Volumes, Timings  
13: Route 1A & Route 16

11/27/2017

	→	↘	↑	↗	↓	↖							
Lane Group	EBT	EBR2	NBT	NBR	SBT	NWR2	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations	↑↑	↗↗	↑↑	↗	↑↑	↖↖							
Traffic Volume (vph)	525	900	975	480	850	1100							
Future Volume (vph)	525	900	975	480	850	1100							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900							
Storage Length (ft)				100									
Storage Lanes				1									
Taper Length (ft)													
Satd. Flow (prot)	3471	2787	3438	1568	3406	2814							
Flt Permitted													
Satd. Flow (perm)	3471	2787	3438	1568	3406	2814							
Right Turn on Red		Yes				Yes							
Satd. Flow (RTOR)		518				144							
Link Speed (mph)	30		30		30								
Link Distance (ft)	272		380		403								
Travel Time (s)	6.2		8.6		9.2								
Confl. Peds. (#/hr)		2											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92							
Heavy Vehicles (%)	4%	2%	5%	3%	6%	1%							
Shared Lane Traffic (%)													
Lane Group Flow (vph)	571	978	1060	522	924	1196							
Turn Type	NA	Prot	NA	custom	NA	Perm							
Protected Phases	5 6 8	5 6 8	1 2	1	1 2 3		2	3	4	5	6	7	8
Permitted Phases						2 3 4							
Minimum Split (s)				10.0			19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)				35.0			14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)				30.7%			12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)				4.0			4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)				1.0			1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)				0.0									
Total Lost Time (s)				5.0									
Lead/Lag				Lead			Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?													
Act Effct Green (s)	28.0	28.0	44.0	30.0	60.0	41.0							
Actuated g/C Ratio	0.25	0.25	0.39	0.26	0.53	0.36							
v/c Ratio	0.67	0.91	0.80	1.27	0.52	1.08							
Control Delay	32.3	22.5	36.6	174.4	0.7	84.1							
Queue Delay	10.1	3.1	0.0	0.0	0.2	0.0							
Total Delay	42.3	25.5	36.6	174.4	0.9	84.1							
LOS	D	C	D	F	A	F							
Approach Delay	31.7		82.1		0.9								
Approach LOS	C		F		A								
Queue Length 50th (ft)	143	55	358	~483	0	~519							
Queue Length 95th (ft)	213	#118	445	#693	0	#667							
Internal Link Dist (ft)	192		300		323								
Turn Bay Length (ft)				100									
Base Capacity (vph)	852	1075	1326	412	1792	1104							
Starvation Cap Reductn	251	47	0	0	211	0							
Spillback Cap Reductn	0	0	0	0	0	0							
Storage Cap Reductn	0	0	0	0	0	0							
Reduced v/c Ratio	0.95	0.95	0.80	1.27	0.58	1.08							

Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.27

Intersection Signal Delay: 53.4

Intersection LOS: D

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

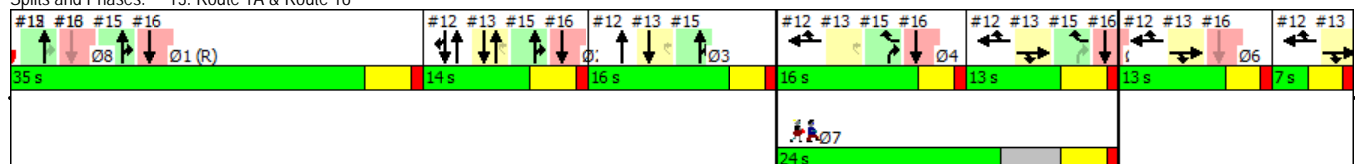
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 13: Route 1A & Route 16



HCM Signalized Intersection Capacity Analysis  
13: Route 1A & Route 16

11/27/2017

	→	↘	↑	↗	↓	↙
Movement	EBT	EBR2	NBT	NBR	SBT	NWR2
Lane Configurations	↑↑	↑↑	↑↑	↑	↑↑	↑↑
Traffic Volume (vph)	525	900	975	480	850	1100
Future Volume (vph)	525	900	975	480	850	1100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.95	0.88	0.95	1.00	0.95	0.88
Frbp, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)	3471	2787	3438	1568	3406	2814
Flt Permitted	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (perm)	3471	2787	3438	1568	3406	2814
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	571	978	1060	522	924	1196
RTOR Reduction (vph)	0	404	0	0	0	96
Lane Group Flow (vph)	571	574	1060	522	924	1100
Confl. Peds. (#/hr)	2					
Heavy Vehicles (%)	4%	2%	5%	3%	6%	1%
Turn Type	NA	Prot	NA	custom	NA	Perm
Protected Phases	5 6 8	5 6 8	1 2	1	1 2 3	
Permitted Phases						2 3 4
Actuated Green, G (s)	29.0	29.0	44.0	30.0	61.0	42.0
Effective Green, g (s)	25.0	25.0	44.0	30.0	61.0	38.0
Actuated g/C Ratio	0.22	0.22	0.39	0.26	0.54	0.33
Clearance Time (s)	5.0					
Lane Grp Cap (vph)	761	611	1326	412	1822	938
v/s Ratio Prot	0.16	c0.21	0.31	c0.33	0.27	
v/s Ratio Perm						c0.39
v/c Ratio	0.75	0.94	0.80	1.27	0.51	1.17
Uniform Delay, d1	41.6	43.7	31.1	42.0	16.9	38.0
Progression Factor	0.72	0.47	1.00	1.00	0.00	1.00
Incremental Delay, d2	6.4	23.3	5.1	138.2	0.7	89.1
Delay (s)	36.4	43.9	36.2	180.2	0.7	127.1
Level of Service	D	D	D	F	A	F
Approach Delay (s)	41.1		83.7		0.7	
Approach LOS	D		F		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		66.4		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		1.28				
Actuated Cycle Length (s)		114.0		Sum of lost time (s)		31.0
Intersection Capacity Utilization		Err%		ICU Level of Service		H
Analysis Period (min)		15				
c Critical Lane Group						

Lanes, Volumes, Timings  
15: VFW Parkway

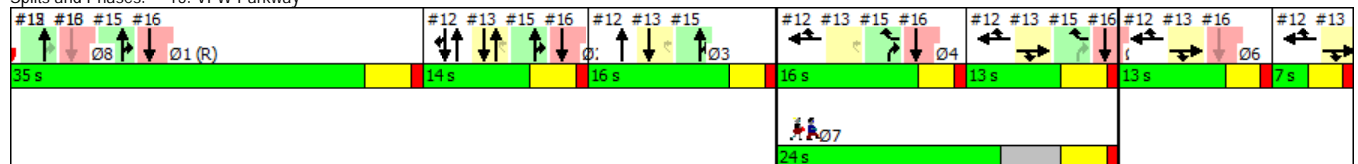
11/27/2017

	↖	↗	↑	↘	↙	↓								
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations		↗↗	↑↑	↘↘										
Traffic Volume (vph)	0	1080	440	1665	0	0								
Future Volume (vph)	0	1080	440	1665	0	0								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Satd. Flow (prot)	0	2787	3539	2787	0	0								
Flt Permitted														
Satd. Flow (perm)	0	2787	3539	2787	0	0								
Right Turn on Red		Yes		Yes										
Satd. Flow (RTOR)		849		1810										
Link Speed (mph)	30		30			30								
Link Distance (ft)	507		317			245								
Travel Time (s)	11.5		7.2			5.6								
Confl. Peds. (#/hr)		11												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	1174	478	1810	0	0								
Turn Type		custom	NA	custom										
Protected Phases		4 5	1 2 3 8	1 2 3 4			1	2	3	4	5	6	7	8
Permitted Phases				5 8										
Minimum Split (s)							10.0	19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)							35.0	14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)							31%	12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)							4.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)														
Total Lost Time (s)														
Lead/Lag							Lead	Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?														
Act Effct Green (s)		25.0	67.0	96.0										
Actuated g/C Ratio		0.22	0.59	0.84										
v/c Ratio		0.92	0.23	0.69										
Control Delay		24.5	13.9	1.0										
Queue Delay		46.4	1.2	3.7										
Total Delay		70.9	15.2	4.8										
LOS		E	B	A										
Approach Delay	70.9		6.9											
Approach LOS	E		A											
Queue Length 50th (ft)		149	100	0										
Queue Length 95th (ft)		#315	m96	m14										
Internal Link Dist (ft)	427		237			165								
Turn Bay Length (ft)														
Base Capacity (vph)		1274	2079	2632										
Starvation Cap Reductn		0	1333	718										
Spillback Cap Reductn		362	958	0										
Storage Cap Reductn		0	0	0										
Reduced v/c Ratio		1.29	0.64	0.95										

Intersection Summary


Area Type:	Other
Cycle Length: 114	
Actuated Cycle Length: 114	
Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green	
Natural Cycle: 120	
Control Type: Pretimed	
Maximum v/c Ratio: 1.27	
Intersection Signal Delay: 28.6	Intersection LOS: C
Intersection Capacity Utilization 62.4%	ICU Level of Service B
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 15: VFW Parkway



HCM Signalized Intersection Capacity Analysis  
15: VFW Parkway





11/27/2017

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗↘	↗↘	↗↘		
Traffic Volume (vph)	0	1080	440	1665	0	0
Future Volume (vph)	0	1080	440	1665	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.0	5.0		
Lane Util. Factor		0.88	0.95	0.88		
Flpb, ped/bikes		1.00	1.00	1.00		
Flpb, ped/bikes		1.00	1.00	1.00		
Frt		0.85	1.00	0.85		
Flt Protected		1.00	1.00	1.00		
Satd. Flow (prot)		2787	3539	2787		
Flt Permitted		1.00	1.00	1.00		
Satd. Flow (perm)		2787	3539	2787		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1174	478	1810	0	0
RTOR Reduction (vph)	0	670	0	476	0	0
Lane Group Flow (vph)	0	504	478	1334	0	0
Confl. Peds. (#/hr)		11				
Turn Type		custom	NA	custom		
Protected Phases		4 5	1 2 3 8	1 2 3 4		
Permitted Phases				5 8		
Actuated Green, G (s)		24.0	68.0	88.0		
Effective Green, g (s)		24.0	64.0	84.0		
Actuated g/C Ratio		0.21	0.56	0.74		
Clearance Time (s)						
Lane Grp Cap (vph)		586	1986	2053		
v/s Ratio Prot		c0.18	0.14	c0.42		
v/s Ratio Perm				0.06		
v/c Ratio		0.86	0.24	0.65		
Uniform Delay, d1		43.4	12.7	7.6		
Progression Factor		1.00	1.23	9.81		
Incremental Delay, d2		15.2	0.0	0.1		
Delay (s)		58.5	15.7	74.4		
Level of Service		E	B	E		
Approach Delay (s)	58.5		62.1		0.0	
Approach LOS	E		E		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		60.9		HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio		0.75				
Actuated Cycle Length (s)		114.0		Sum of lost time (s)	31.0	
Intersection Capacity Utilization		62.4%		ICU Level of Service	B	
Analysis Period (min)		15				

c Critical Lane Group

Lanes, Volumes, Timings  
16: Beach Street

11/27/2017

							Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR								
Lane Configurations														
Traffic Volume (vph)	0	375	0	0	1050	455								
Future Volume (vph)	0	375	0	0	1050	455								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Satd. Flow (prot)	0	1580	0	0	3539	1583								
Flt Permitted														
Satd. Flow (perm)	0	1547	0	0	3539	1538								
Right Turn on Red		Yes				Yes								
Satd. Flow (RTOR)		297				286								
Link Speed (mph)	30			30	30									
Link Distance (ft)	572			272	244									
Travel Time (s)	13.0			6.2	5.5									
Confl. Peds. (#/hr)		31				17								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	2%	4%	2%	2%	2%	2%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	408	0	0	1141	495								
Turn Type		Free			NA	Free								
Protected Phases					1 2 4 5		1	2	3	4	5	6	7	8
Permitted Phases		Free			6 8	Free								
Minimum Split (s)							10.0	19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)							35.0	14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)							31%	12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)							4.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)														
Total Lost Time (s)														
Lead/Lag							Lead	Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?														
Act Effect Green (s)		114.0			93.0	114.0								
Actuated g/C Ratio		1.00			0.82	1.00								
v/c Ratio		0.26			0.40	0.32								
Control Delay		0.4			0.6	0.3								
Queue Delay		0.0			0.8	0.0								
Total Delay		0.4			1.4	0.3								
LOS		A			A	A								
Approach Delay	0.4				1.1									
Approach LOS	A				A									
Queue Length 50th (ft)		0			12	0								
Queue Length 95th (ft)		0			m11	m0								
Internal Link Dist (ft)	492			192	164									
Turn Bay Length (ft)														
Base Capacity (vph)		1547			2887	1538								
Starvation Cap Reductn		0			1329	0								
Spillback Cap Reductn		25			57	0								
Storage Cap Reductn		0			0	0								
Reduced v/c Ratio		0.27			0.73	0.32								

Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.27

Intersection Signal Delay: 0.9

Intersection LOS: A

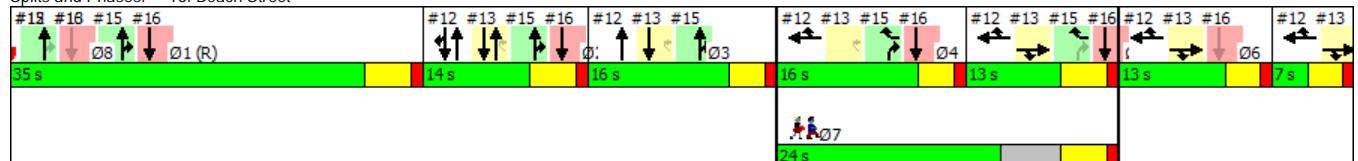
Intersection Capacity Utilization 46.3%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: Beach Street












HCM Signalized Intersection Capacity Analysis  
16: Beach Street

11/27/2017

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↰			↰↰	↰
Traffic Volume (vph)	0	375	0	0	1050	455
Future Volume (vph)	0	375	0	0	1050	455
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			5.0	4.0
Lane Util. Factor		1.00			0.95	1.00
Frpb, ped/bikes		0.98			1.00	0.97
Flpb, ped/bikes		1.00			1.00	1.00
Frt		0.86			1.00	0.85
Flt Protected		1.00			1.00	1.00
Satd. Flow (prot)		1547			3539	1538
Flt Permitted		1.00			1.00	1.00
Satd. Flow (perm)		1547			3539	1538
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	408	0	0	1141	495
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	408	0	0	1141	495
Confl. Peds. (#/hr)		31				17
Heavy Vehicles (%)	2%	4%	2%	2%	2%	2%
Turn Type		Free			NA	Free
Protected Phases				1 2 4 5		
Permitted Phases		Free		6 8		Free
Actuated Green, G (s)		114.0		84.0		114.0
Effective Green, g (s)		114.0		76.0		114.0
Actuated g/C Ratio		1.00		0.67		1.00
Clearance Time (s)						
Lane Grp Cap (vph)		1547			2514	1538
v/s Ratio Prot				c0.25		
v/s Ratio Perm		0.26		0.07		c0.32
v/c Ratio		0.26		0.45		0.32
Uniform Delay, d1		0.0		9.1		0.0
Progression Factor		1.00		0.13		1.00
Incremental Delay, d2		0.4		0.3		0.3
Delay (s)		0.4		1.5		0.3
Level of Service		A		A		A
Approach Delay (s)	0.4			0.0	1.1	
Approach LOS	A			A	A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		1.0		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.52				
Actuated Cycle Length (s)		114.0		Sum of lost time (s)		31.0
Intersection Capacity Utilization		46.3%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

13796.00 :: Suffolk Downs Redevelopment  
7: Route 1A & Waldemar Avenue










2024 No Build Condition  
Timing Plan: Evening Peak Hou

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	105	2565	110	0	1790
Future Volume (vph)	0	105	2565	110	0	1790
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1808	3474	0	0	3438
Flt Permitted						
Satd. Flow (perm)	0	1808	3474	0	0	3438
Link Speed (mph)	30		30			30
Link Distance (ft)	1034		925			475
Travel Time (s)	23.5		21.0			10.8
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	3%	10%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	114	2908	0	0	1946
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	87.6%			ICU Level of Service E		
Analysis Period (min)	15					









13796.00 :: Suffolk Downs Redevelopment  
7: Route 1A & Waldemar Avenue

2024 No Build Condition  
Timing Plan: Evening Peak Hou

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	105	2565	110	0	1790
Future Volume (Veh/h)	0	105	2565	110	0	1790
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	114	2788	120	0	1946
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			925			880
pX, platoon unblocked	0.65	0.36			0.36	
vC, conflicting volume	3821	1454			2908	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	223	0			2743	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	71			100	
cM capacity (veh/h)	488	387			53	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	114	1859	1049	973	973	
Volume Left	0	0	0	0	0	
Volume Right	114	0	120	0	0	
cSH	387	1700	1700	1700	1700	
Volume to Capacity	0.29	1.09	0.62	0.57	0.57	
Queue Length 95th (ft)	30	0	0	0	0	
Control Delay (s)	18.1	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	18.1	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			87.6%	ICU Level of Service		E
Analysis Period (min)			15			

13796.00 :: Suffolk Downs Redevelopment  
8: Route 1A & Tomasello Dr

2024 No Build Condition  
Timing Plan: Evening Peak Hou

								
Lane Group	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	5	5	20	2335	315	15	5	1765
Future Volume (vph)	5	5	20	2335	315	15	5	1765
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	11	11	12	11	11
Grade (%)	0%			0%				0%
Storage Length (ft)	0	0	0		0		150	
Storage Lanes	1	1	0		0		1	
Taper Length (ft)	25		25				25	
Satd. Flow (prot)	1925	1723	0	3307	0	0	1745	3355
Flt Permitted	0.950						0.950	
Satd. Flow (perm)	1925	1723	0	3307	0	0	1745	3355
Link Speed (mph)	30			30				30
Link Distance (ft)	3579			475				405
Travel Time (s)	81.3			10.8				9.2
Confl. Peds. (#/hr)					2		2	
Confl. Bikes (#/hr)								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	4%	1%	0%	0%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%			0%				0%
Shared Lane Traffic (%)								
Lane Group Flow (vph)	5	5	0	2902	0	0	21	1918
Sign Control	Stop			Free				Free

Intersection Summary

Area Type: Other














Control Type: Unsignalized

Intersection Capacity Utilization 98.9% ICU Level of Service F

Analysis Period (min) 15













13796.00 :: Suffolk Downs Redevelopment  
8: Route 1A & Tomasello Dr

2024 No Build Condition  
Timing Plan: Evening Peak Hou

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	5	5	20	2335	315	15	5	1765
Future Volume (Veh/h)	5	5	20	2335	315	15	5	1765
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	5	0	2538	342	0	5	1918
Pedestrians	2							
Lane Width (ft)	14.0							
Walking Speed (ft/s)	4.0							
Percent Blockage	0							
Right turn flare (veh)								
Median type				None				None
Median storage (veh)								
Upstream signal (ft)								405
pX, platoon unblocked	0.45		0.00			0.00		
vC, conflicting volume	3680	1442	0			0	2882	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	4496	1442	0			0	2882	
tC, single (s)	6.8	6.9	0.0			0.0	4.1	
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0			0.0	2.2	
p0 queue free %	0	96	0			0	96	
cM capacity (veh/h)	0	124	0			0	130	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3	
Volume Total	5	5	1692	1188	5	959	959	
Volume Left	5	0	0	0	5	0	0	
Volume Right	0	5	0	342	0	0	0	
cSH	0	124	1700	1700	130	1700	1700	
Volume to Capacity	12.26	0.04	1.00	0.70	0.04	0.56	0.56	
Queue Length 95th (ft)	Err	3	0	0	3	0	0	
Control Delay (s)	Err	35.3	0.0	0.0	33.7	0.0	0.0	
Lane LOS	F	E			D			
Approach Delay (s)	5017.2		0.0		0.1			
Approach LOS	F							
Intersection Summary								
Average Delay			10.5					
Intersection Capacity Utilization			98.9%		ICU Level of Service			F
Analysis Period (min)			15					

13796.00 :: Suffolk Downs Redevelopment  
45: Bennington Street & Crescent Ave

2024 No Build Condition  
Timing Plan: Evening Peak Hou











						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			 
Traffic Volume (vph)	60	130	665	5	0	430
Future Volume (vph)	60	130	665	5	0	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1615	1445	3606	0	0	3353
Flt Permitted	0.950					
Satd. Flow (perm)	1615	1445	3606	0	0	3353
Link Speed (mph)	30		30			30
Link Distance (ft)	817		1471			233
Travel Time (s)	18.6		33.4			5.3
Confl. Peds. (#/hr)	1	8				
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	1	1		1		1
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	65	141	728	0	0	467
Sign Control	Stop		Free			Free
























Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	35.1%
Analysis Period (min)	15
	ICU Level of Service A

13796.00 :: Suffolk Downs Redevelopment  
45: Bennington Street & Crescent Ave

2024 No Build Condition  
Timing Plan: Evening Peak Hou

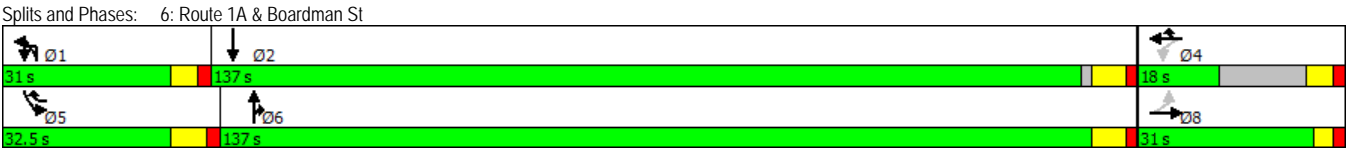
						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	60	130	665	5	0	430
Future Volume (Veh/h)	60	130	665	5	0	430
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	65	141	723	5	0	467
Pedestrians			1			8
Lane Width (ft)			12.0			12.0
Walking Speed (ft/s)			4.0			4.0
Percent Blockage			0			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						233
pX, platoon unblocked						
vC, conflicting volume	960	372			728	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	960	372			728	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	75	78			100	
cM capacity (veh/h)	258	627			885	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	65	141	482	246	234	234
Volume Left	65	0	0	0	0	0
Volume Right	0	141	0	5	0	0
cSH	258	627	1700	1700	1700	1700
Volume to Capacity	0.25	0.22	0.28	0.14	0.14	0.14
Queue Length 95th (ft)	24	21	0	0	0	0
Control Delay (s)	23.6	12.4	0.0	0.0	0.0	0.0
Lane LOS	C	B				
Approach Delay (s)	15.9		0.0		0.0	
Approach LOS	C					
<b>Intersection Summary</b>						
Average Delay			2.3			
Intersection Capacity Utilization			35.1%		ICU Level of Service	A
Analysis Period (min)			15			
























													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (vph)	45	15	120	465	60	135	50	85	1240	170	125	2375	30
Future Volume (vph)	45	15	120	465	60	135	50	85	1240	170	125	2375	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	12	12	10	10	12	11	11	11	11	11	12
Grade (%)		0%			0%				0%			0%	
Storage Length (ft)	130		0	0		250		400		500	380		0
Storage Lanes	1		0	0		1		1		1	1		0
Taper Length (ft)	25			25				25			25		
Satd. Flow (prot)	1504	1473	0	0	1641	1436	0	1523	3172	1446	1544	3292	0
Flt Permitted	0.154				0.391			0.950			0.950		
Satd. Flow (perm)	244	1473	0	0	670	1436	0	1523	3172	1446	1544	3292	0
Right Turn on Red			Yes			No				Yes			Yes
Satd. Flow (RTOR)		107								185		1	
Link Speed (mph)		30			30				30			30	
Link Distance (ft)		537			1355				733			925	
Travel Time (s)		12.2			30.8				16.7			21.0	
Confl. Peds. (#/hr)	22					22							
Confl. Bikes (#/hr)													
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	12%	0%	9%	4%	0%	5%	2%	22%	10%	8%	13%	4%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	8	0
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%				0%			0%	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	49	146	0	0	570	147	0	146	1348	185	136	2615	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases		8			4	4 5	1	1	6	6	5	2	
Permitted Phases	8			4									
Detector Phase	8	8		4	4	4 5	1	1	6	6	5	2	
Switch Phase													
Minimum Initial (s)	6.0	6.0		6.0	6.0		6.0	6.0	20.0	20.0	6.0	20.0	
Minimum Split (s)	26.0	26.0		12.0	12.0		12.0	12.0	27.0	27.0	13.5	31.0	
Total Split (s)	31.0	31.0		18.0	18.0		31.0	31.0	137.0	137.0	32.5	137.0	
Total Split (%)	15.5%	15.5%		9.0%	9.0%		15.5%	15.5%	68.3%	68.3%	16.2%	68.3%	
Yellow Time (s)	3.0	3.0		4.0	4.0		4.0	4.0	5.0	5.0	5.5	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	5.0	5.0			6.0			5.0	6.0	6.0	6.5	6.0	
Lead/Lag							Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?													
Recall Mode	None	None		None	None		None	None	Min	Min	None	Min	
Act Effect Green (s)	26.0	26.0			25.0	53.1		22.6	130.6	130.6	21.5	131.1	
Actuated g/C Ratio	0.13	0.13			0.13	0.27		0.12	0.67	0.67	0.11	0.67	
v/c Ratio	1.53	0.51			6.71	0.38		0.83	0.64	0.18	0.80	1.19	
Control Delay	402.0	30.5			2594.7	60.8		119.1	21.0	1.8	116.9	119.3	
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	402.0	30.5			2594.7	60.8		119.1	21.0	1.8	116.9	119.3	
LOS	F	C			F	E		F	C	A	F	F	
Approach Delay		123.8			2075.2				27.4			119.2	
Approach LOS		F			F				C			F	
Queue Length 50th (ft)	-89	46			-1420	156		187	516	0	175	-2164	
Queue Length 95th (ft)	#195	131			#1682	230		#294	616	31	261	#2276	
Internal Link Dist (ft)		457			1275				653			845	
Turn Bay Length (ft)	130					250		400		500	380		
Base Capacity (vph)	32	288			85	421		202	2126	1030	205	2230	
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0	
Storage Cap Reductn	0	0			0	0		0	0	0	0	0	
Reduced v/c Ratio	1.53	0.51			6.71	0.35		0.72	0.63	0.18	0.66	1.17	
Intersection Summary													
Area Type:	Other												
Cycle Length:	200.5												
Actuated Cycle Length:	195.7												
Natural Cycle:	140												
Control Type:	Semi Act-Uncoord												
Maximum v/c Ratio:	6.71												
Intersection Signal Delay:	353.0												
Intersection Capacity Utilization	129.5%												
	Intersection LOS: F												
	ICU Level of Service H												

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
















# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.



													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (vph)	45	15	120	465	60	135	50	85	1240	170	125	2375	30
Future Volume (vph)	45	15	120	465	60	135	50	85	1240	170	125	2375	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	12	12	10	10	12	11	11	11	11	11	12
Total Lost time (s)	5.0	5.0			6.0	6.0		5.0	6.0	6.0	6.5	6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.87			1.00	0.85		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00			0.96	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1504	1473			1640	1436		1523	3172	1446	1544	3292	
Flt Permitted	0.15	1.00			0.39	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	244	1473			670	1436		1523	3172	1446	1544	3292	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	16	130	505	65	147	54	92	1348	185	136	2582	33
RTOR Reduction (vph)	0	93	0	0	0	0	0	0	0	61	0	0	0
Lane Group Flow (vph)	49	53	0	0	570	147	0	146	1348	124	136	2615	0
Confl. Peds. (#/hr)	22					22							
Heavy Vehicles (%)	12%	0%	9%	4%	0%	5%	2%	22%	10%	8%	13%	4%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	8	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases		8			4	4 5	1	1	6	6	5	2	
Permitted Phases	8			4									
Actuated Green, G (s)	26.0	26.0			25.0	51.5		21.6	129.7	129.7	20.5	130.1	
Effective Green, g (s)	26.0	26.0			25.0	51.5		22.6	130.7	130.7	21.5	131.1	
Actuated g/C Ratio	0.13	0.13			0.13	0.26		0.12	0.67	0.67	0.11	0.67	
Clearance Time (s)	5.0	5.0			6.0			6.0	7.0	7.0	7.5	7.0	
Vehicle Extension (s)	2.0	2.0			2.0			2.0	4.0	4.0	2.0	4.0	
Lane Grp Cap (vph)	32	195			85	377		175	2118	965	169	2205	
v/s Ratio Prot		0.04				0.10		c0.10	0.42	0.09	0.09	c0.79	
v/s Ratio Perm	0.20				c0.85								
v/c Ratio	1.53	0.27			6.71	0.39		0.83	0.64	0.13	0.80	1.19	
Uniform Delay, d1	84.8	76.3			85.3	59.2		84.7	18.8	11.8	85.1	32.3	
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	0.99	
Incremental Delay, d2	349.9	0.3			2592.3	0.2		26.5	0.7	0.1	22.4	88.5	
Delay (s)	434.7	76.6			2677.6	59.4		111.2	19.5	11.9	107.4	120.5	
Level of Service	F	E			F	E		F	B	B	F	F	
Approach Delay (s)		166.6			2140.9				26.6			119.9	
Approach LOS		F			F				C			F	
Intersection Summary													
HCM 2000 Control Delay		363.5			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio		1.93											
Actuated Cycle Length (s)		195.7			Sum of lost time (s)				19.5				
Intersection Capacity Utilization		129.5%			ICU Level of Service				H				
Analysis Period (min)		15											
c Critical Lane Group													

c Critical Lane Group



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	15	5	0	0	0	0	1240	5	0	2390	0
Future Volume (vph)	55	15	5	0	0	0	0	1240	5	0	2390	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	12	12	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1522	0	0	0	0	0	3220	0	0	3323	0
Flt Permitted		0.964										
Satd. Flow (perm)	0	1522	0	0	0	0	0	3220	0	0	3323	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		122			363			405			225	
Travel Time (s)		2.8			8.3			9.2			5.1	
Confl. Peds. (#/hr)			1	1					2	2		
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	20%	93%	33%	2%	2%	2%	0%	8%	80%	0%	5%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	81	0	0	0	0	0	1353	0	0	2598	0
Turn Type	Perm	NA						NA			NA	
Protected Phases		2						1			1	
Permitted Phases	2											
Detector Phase	2	2						1			1	
Switch Phase												
Minimum Initial (s)	10.0	10.0						20.0			20.0	
Minimum Split (s)	16.0	16.0						27.0			27.0	
Total Split (s)	36.0	36.0						55.0			55.0	
Total Split (%)	39.6%	39.6%						60.4%			60.4%	
Yellow Time (s)	4.0	4.0						5.0			5.0	
All-Red Time (s)	2.0	2.0						2.0			2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.0						7.0			7.0	
Lead/Lag	Lag	Lag						Lead			Lead	
Lead-Lag Optimize?												
Recall Mode	None	None						Max			Max	
Act Effect Green (s)		11.0						52.5			52.5	
Actuated g/C Ratio		0.15						0.73			0.73	
v/c Ratio		0.35						0.57			1.07	
Control Delay		31.4						7.5			56.2	
Queue Delay		0.0						0.0			0.0	
Total Delay		31.4						7.5			56.2	
LOS		C						A			E	
Approach Delay		31.4						7.5			56.2	
Approach LOS		C						A			E	
Queue Length 50th (ft)		32						145			~722	
Queue Length 95th (ft)		71						238			#925	
Internal Link Dist (ft)		42			283			325			145	
Turn Bay Length (ft)												
Base Capacity (vph)		636						2356			2431	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.13						0.57			1.07	
Intersection Summary												
Area Type:	Other											
Cycle Length: 91												
Actuated Cycle Length: 71.8												
Natural Cycle: 100												
Control Type: Semi Act-Uncoord												
Maximum v/c Ratio: 1.07												
Intersection Signal Delay: 39.4	Intersection LOS: D											
Intersection Capacity Utilization 85.2%	ICU Level of Service E											

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.
















Queue shown is maximum after two cycles.








# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 9: Route 1A & Jughandle



												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	15	5	0	0	0	0	1240	5	0	2390	0
Future Volume (vph)	55	15	5	0	0	0	0	1240	5	0	2390	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	16	16	16	12	12	12	11	11	11	11	11	11
Total Lost time (s)		6.0						7.0			7.0	
Lane Util. Factor		1.00						0.95			0.95	
Frbp, ped/bikes		1.00						1.00			1.00	
Flpb, ped/bikes		1.00						1.00			1.00	
Frt		0.99						1.00			1.00	
Flt Protected		0.96						1.00			1.00	
Satd. Flow (prot)		1521						3221			3323	
Flt Permitted		0.96						1.00			1.00	
Satd. Flow (perm)		1521						3221			3323	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	16	5	0	0	0	0	1348	5	0	2598	0
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	80	0	0	0	0	0	1353	0	0	2598	0
Confl. Peds. (#/hr)			1	1					2	2		
Heavy Vehicles (%)	20%	93%	33%	2%	2%	2%	0%	8%	80%	0%	5%	0%
Turn Type	Perm	NA						NA			NA	
Protected Phases		2						1			1	
Permitted Phases	2											
Actuated Green, G (s)		8.9						51.1			51.1	
Effective Green, g (s)		8.9						51.1			51.1	
Actuated g/C Ratio		0.12						0.70			0.70	
Clearance Time (s)		6.0						7.0			7.0	
Vehicle Extension (s)		4.0						4.0			4.0	
Lane Grp Cap (vph)		185						2254			2326	
v/s Ratio Prot								0.42			c0.78	
v/s Ratio Perm		0.05										
v/c Ratio		0.43						0.60			1.12	
Uniform Delay, d1		29.7						5.7			10.9	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		2.2						1.2			59.2	
Delay (s)		31.9						6.9			70.1	
Level of Service		C						A			E	
Approach Delay (s)		31.9			0.0			6.9			70.1	
Approach LOS		C			A			A			E	
<b>Intersection Summary</b>												
HCM 2000 Control Delay		48.1									D	
HCM 2000 Volume to Capacity ratio		1.02										
Actuated Cycle Length (s)		73.0									13.0	
Intersection Capacity Utilization		85.2%									E	
Analysis Period (min)		15										
c Critical Lane Group												

							
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↓	↑↑↑		
Traffic Volume (vph)	1135	260	30	300	1465	0	0
Future Volume (vph)	1135	260	30	300	1465	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	9	11	12	12
Grade (%)	0%				0%	0%	
Storage Length (ft)		500		130		0	0
Storage Lanes		0		1		0	0
Taper Length (ft)				25		25	
Satd. Flow (prot)	4682	0	0	1590	4855	0	0
Flt Permitted				0.950			
Satd. Flow (perm)	4682	0	0	1587	4855	0	0
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	170						
Link Speed (mph)	30				30	30	
Link Distance (ft)	572				1857	345	
Travel Time (s)	13.0				42.2	7.8	
Confl. Peds. (#/hr)		7	2	7			
Confl. Bikes (#/hr)							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	6%	4%	2%	3%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	2	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%				0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1517	0	0	359	1592	0	0
Turn Type	NA		Prot	Prot	NA		
Protected Phases	2		1	1	1 2		
Permitted Phases							
Detector Phase	2		1	1	1 2		
Switch Phase							
Minimum Initial (s)	8.0		8.0	8.0			
Minimum Split (s)	13.0		13.0	13.0			
Total Split (s)	24.0		17.0	17.0			
Total Split (%)	58.5%		41.5%	41.5%			
Yellow Time (s)	3.5		3.5	3.5			
All-Red Time (s)	1.5		1.5	1.5			
Lost Time Adjust (s)	0.0			0.0			
Total Lost Time (s)	5.0			5.0			
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?							
Recall Mode	Min		None	None			
Act Effect Green (s)	19.0			12.0	41.0		
Actuated g/C Ratio	0.46			0.29	1.00		
v/c Ratio	0.67			0.77	0.33		
Control Delay	9.3			28.5	0.2		
Queue Delay	0.0			0.0	0.0		
Total Delay	9.3			28.5	0.2		
LOS	A			C	A		
Approach Delay	9.3				5.4		
Approach LOS	A				A		
Queue Length 50th (ft)	77			74	0		
Queue Length 95th (ft)	114			#182	0		
Internal Link Dist (ft)	492				1777	265	
Turn Bay Length (ft)				130			
Base Capacity (vph)	2260			465	4855		
Starvation Cap Reductn	0			0	0		
Spillback Cap Reductn	0			0	0		
Storage Cap Reductn	0			0	0		
Reduced v/c Ratio	0.67			0.77	0.33		
<b>Intersection Summary</b>							
Area Type:	Other						
Cycle Length: 41							
Actuated Cycle Length: 41							
Natural Cycle: 45							
Control Type: Actuated-Uncoordinated							
Maximum v/c Ratio: 0.77							
Intersection Signal Delay: 7.1	Intersection LOS: A						
Intersection Capacity Utilization 54.5%	ICU Level of Service A						


























Analysis Period (min) 15  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 11: Route 1A on-ramp & Route 145



	→	↘	↙	↗	←	↖	↘
Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↘	↑↑↑		
Traffic Volume (vph)	1135	260	30	300	1465	0	0
Future Volume (vph)	1135	260	30	300	1465	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	9	11	12	12
Total Lost time (s)	5.0			5.0	5.0		
Lane Util. Factor	0.91			1.00	0.91		
Frpb, ped/bikes	0.99			1.00	1.00		
Flpb, ped/bikes	1.00			1.00	1.00		
Frt	0.97			1.00	1.00		
Flt Protected	1.00			0.95	1.00		
Satd. Flow (prot)	4682			1590	4855		
Flt Permitted	1.00			0.95	1.00		
Satd. Flow (perm)	4682			1590	4855		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1234	283	33	326	1592	0	0
RTOR Reduction (vph)	91	0	0	0	0	0	0
Lane Group Flow (vph)	1426	0	0	359	1592	0	0
Confl. Peds. (#/hr)		7	2	7			
Heavy Vehicles (%)	3%	6%	4%	2%	3%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	2	0	0
Turn Type	NA		Prot	Prot	NA		
Protected Phases	2		1	1	1 2		
Permitted Phases							
Actuated Green, G (s)	19.0			12.0	41.0		
Effective Green, g (s)	19.0			12.0	41.0		
Actuated g/C Ratio	0.46			0.29	1.00		
Clearance Time (s)	5.0			5.0			
Vehicle Extension (s)	2.0			2.0			
Lane Grp Cap (vph)	2169			465	4855		
v/s Ratio Prot	c0.30			c0.23	0.33		
v/s Ratio Perm							
v/c Ratio	0.66			0.77	0.33		
Uniform Delay, d1	8.5			13.3	0.0		
Progression Factor	1.00			1.00	1.00		
Incremental Delay, d2	0.6			7.1	0.0		
Delay (s)	9.0			20.4	0.0		
Level of Service	A			C	A		
Approach Delay (s)	9.0				3.8	0.0	
Approach LOS	A				A	A	
<b>Intersection Summary</b>							
HCM 2000 Control Delay		6.1		HCM 2000 Level of Service		A	
HCM 2000 Volume to Capacity ratio		0.70					
Actuated Cycle Length (s)		41.0		Sum of lost time (s)		10.0	
Intersection Capacity Utilization		54.5%		ICU Level of Service		A	
Analysis Period (min)		15					

c Critical Lane Group

																		
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SEL	SER					
Lane Configurations																		
Traffic Volume (vph)	25	275	25	950	360	65	90	455	915	430	5	205	20					
Future Volume (vph)	25	275	25	950	360	65	90	455	915	430	5	205	20					
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900					
Lane Width (ft)	12	10	16	12	12	12	12	12	14	16	12	12	12					
Grade (%)		0%			0%			0%		0%		0%						
Storage Length (ft)	50		0	0		0			0		0	0	0					
Storage Lanes	1		1	2		0			1		0	1	0					
Taper Length (ft)	25			25								25						
Satd. Flow (prot)	0	3266	1746	3400	1744	0	0	3471	1656	3889	0	1742	0					
Flt Permitted		0.996		0.950								0.956						
Satd. Flow (perm)	0	3265	1746	3364	1744	0	0	3471	1656	3889	0	1742	0					
Right Turn on Red			Yes			No		Yes										
Satd. Flow (RTOR)			126					80										
Link Speed (mph)		30			30			30		30		30						
Link Distance (ft)		485			572			480		673		302						
Travel Time (s)		11.0			13.0			10.9		15.3		6.9						
Confl. Peds. (#/hr)	4		5	5			4				3		5					
Confl. Bikes (#/hr)						1	1											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92					
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%					
Heavy Vehicles (%)	0%	3%	4%	3%	4%	3%	1%	4%	4%	5%	0%	3%	0%					
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0	0					
Parking (#/hr)													1					
Mid-Block Traffic (%)		0%			0%			0%		0%		0%						
Shared Lane Traffic (%)																		
Lane Group Flow (vph)	0	326	27	1033	560	0	0	495	995	472	0	245	0					
Turn Type	Split	NA	Prot	Split	NA			NA	custom	NA		Prot						
Protected Phases	4	4	4	3	3			6	2 3	2		7						
Permitted Phases																		
Detector Phase	4	4	4	3	3			6	2 3	2		7						
Switch Phase																		
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0			8.0		8.0		8.0						
Minimum Split (s)	20.0	20.0	20.0	28.0	28.0			15.0		20.0		20.0						
Total Split (s)	22.0	22.0	22.0	42.0	42.0			57.0		57.0		21.5						
Total Split (%)	15.4%	15.4%	15.4%	29.5%	29.5%			40.0%		40.0%		15.1%						
Yellow Time (s)	4.0	4.0	4.0	3.0	3.0			4.0		4.0		3.5						
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0			3.0		3.0		3.0						
Lost Time Adjust (s)		-1.0	-1.0	-1.0	-1.0			-1.0		-1.0		-1.0						
Total Lost Time (s)		6.0	6.0	5.0	5.0			6.0		6.0		5.5						
Lead/Lag	Lag	Lag	Lag	Lead	Lead													
Lead-Lag Optimize?																		
Recall Mode	None	None	None	None	None			Min		Min		None						
Act Effect Green (s)		16.0	16.0	37.0	37.0			51.0	93.0	51.0		16.0						
Actuated g/C Ratio		0.11	0.11	0.26	0.26			0.36	0.65	0.36		0.11						
v/c Ratio		0.89	0.09	1.17	1.24			0.40	0.90	0.34		1.26						
Control Delay		88.3	0.6	134.9	168.8			35.5	31.4	34.3		199.6						
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0	0.0		0.0						
Total Delay		88.3	0.6	134.9	168.8			35.5	31.4	34.3		199.6						
LOS		F	A	F	F			D	C	C		F						
Approach Delay		81.6			146.8			32.7		34.3		199.6						
Approach LOS		F			F			C		C		F						
Queue Length 50th (ft)		159	0	~586	~642			180	685	167		~283						
Queue Length 95th (ft)		#247	0	#721	#873			231	#1081	215		#460						
Internal Link Dist (ft)		405			492			400		593		222						
Turn Bay Length (ft)																		
Base Capacity (vph)		366	307	882	452			1242	1108	1391		195						
Starvation Cap Reductn		0	0	0	0			0	0	0		0						
Spillback Cap Reductn		0	0	0	0			0	0	0		0						
Storage Cap Reductn		0	0	0	0			0	0	0		0						
Reduced v/c Ratio		0.89	0.09	1.17	1.24			0.40	0.90	0.34		1.26						
Intersection Summary																		
Area Type:	Other																	
Cycle Length:	142.5																	
Actuated Cycle Length:	142.5																	
Natural Cycle:	110																	
Control Type:	Actuated-Uncoordinated																	
Maximum v/c Ratio:	1.26																	
Intersection Signal Delay:	90.7																	
Intersection Capacity Utilization	81.2%																	
	Intersection LOS: F																	
	ICU Level of Service D																	

Analysis Period (min) 15

























~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

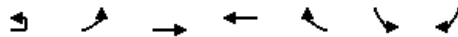
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 31: Route 16 & Winthrop Avenue/Route 145 & Harris Street

 Ø2	 Ø3	 Ø4	 Ø7
57 s	42 s	22 s	21.5 s
 Ø6			
57 s			



																		
Movement	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SEL	SER					
Lane Configurations																		
Traffic Volume (vph)	25	275	25	950	360	65	90	455	915	430	5	205	20					
Future Volume (vph)	25	275	25	950	360	65	90	455	915	430	5	205	20					
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900					
Lane Width	12	10	16	12	12	12	12	12	14	16	12	12	12					
Total Lost time (s)		6.0	6.0	5.0	5.0			6.0	6.0	6.0		5.5						
Lane Util. Factor		0.95	1.00	0.97	1.00			0.95	1.00	0.95		1.00						
Frbp, ped/bikes		1.00	1.00	1.00	0.99			1.00	1.00	1.00		1.00						
Flpb, ped/bikes		1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00						
Frt		1.00	0.85	1.00	0.95			1.00	0.85	1.00		0.99						
Flt Protected		1.00	1.00	0.95	1.00			1.00	1.00	1.00		0.96						
Satd. Flow (prot)		3266	1746	3400	1744			3471	1656	3891		1743						
Flt Permitted		1.00	1.00	0.95	1.00			1.00	1.00	1.00		0.96						
Satd. Flow (perm)		3266	1746	3400	1744			3471	1656	3891		1743						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92					
Adj. Flow (vph)	27	299	27	1033	391	71	98	495	995	467	5	223	22					
RTOR Reduction (vph)	0	0	24	0	0	0	0	0	27	0	0	0	0					
Lane Group Flow (vph)	0	326	3	1033	560	0	0	495	968	472	0	245	0					
Confl. Peds. (#/hr)	4		5	5				4			3		5					
Confl. Bikes (#/hr)						1	1											
Heavy Vehicles (%)	0%	3%	4%	3%	4%	3%	1%	4%	4%	5%	0%	3%	0%					
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0	0					
Parking (#/hr)													1					
Turn Type	Split	NA	Prot	Split	NA			NA	custom	NA		Prot						
Protected Phases	4	4	4	3	3			6	2 3	2		7						
Permitted Phases																		
Actuated Green, G (s)		15.0	15.0	36.0	36.0			50.0	93.0	50.0		15.0						
Effective Green, g (s)		16.0	16.0	37.0	37.0			51.0	94.0	51.0		16.0						
Actuated g/C Ratio		0.11	0.11	0.26	0.26			0.36	0.66	0.36		0.11						
Clearance Time (s)		7.0	7.0	6.0	6.0			7.0		7.0		6.5						
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0		3.0		3.0						
Lane Grp Cap (vph)		366	196	882	452			1242	1092	1392		195						
v/s Ratio Prot		c0.10	0.00	0.30	c0.32			0.14	c0.58	0.12		c0.14						
v/s Ratio Perm																		
v/c Ratio		0.89	0.02	1.17	1.24			0.40	0.89	0.34		1.26						
Uniform Delay, d1		62.4	56.2	52.8	52.8			34.3	19.9	33.4		63.2						
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00						
Incremental Delay, d2		22.6	0.0	89.1	125.2			0.2	8.8	0.1		150.1						
Delay (s)		85.0	56.3	141.9	178.0			34.5	28.7	33.6		213.4						
Level of Service		F	E	F	F			C	C	C		F						
Approach Delay (s)		82.8			154.6			30.6		33.6		213.4						
Approach LOS		F			F			C		C		F						
Intersection Summary																		
HCM 2000 Control Delay			93.7		HCM 2000 Level of Service					F								
HCM 2000 Volume to Capacity ratio			1.07															
Actuated Cycle Length (s)			142.5		Sum of lost time (s)					22.5								
Intersection Capacity Utilization			81.2%		ICU Level of Service					D								
Analysis Period (min)			15															
c Critical Lane Group																		



Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø3	Ø9
Lane Configurations										
Traffic Volume (vph)	5	290	1000	1205	90	160	290			
Future Volume (vph)	5	290	1000	1205	90	160	290			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900			
Lane Width (ft)	12	11	11	11	12	15	12			
Grade (%)			0%	0%		0%				
Storage Length (ft)		120			0	0	150			
Storage Lanes		1			0	1	1			
Taper Length (ft)		25				25				
Satd. Flow (prot)	0	1686	4855	4809	0	1947	1583			
Flt Permitted		0.950				0.950				
Satd. Flow (perm)	0	1686	4855	4809	0	1947	1583			
Right Turn on Red					Yes		Yes			
Satd. Flow (RTOR)				15			315			
Link Speed (mph)			30	30		30				
Link Distance (ft)			1857	236		865				
Travel Time (s)			42.2	5.4		19.7				
Confl. Peds. (#/hr)										
Confl. Bikes (#/hr)					1					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	100%	100%	100%	100%	100%	100%	100%			
Heavy Vehicles (%)	33%	3%	3%	3%	4%	2%	2%			
Bus Blockages (#/hr)	0	0	2	0	0	0	0			
Parking (#/hr)										
Mid-Block Traffic (%)			0%	0%		0%				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	320	1087	1408	0	174	315			
Turn Type	Prot	Prot	NA	NA		Prot	Prot			
Protected Phases	5	5	2 3 5	2 3		7	7	2	3	9
Permitted Phases										
Detector Phase	5	5	2 3 5	2 3		7	7			
Switch Phase										
Minimum Initial (s)	1.0	1.0				4.0	4.0	20.0	8.0	4.0
Minimum Split (s)	20.0	20.0				8.0	8.0	26.0	13.0	22.0
Total Split (s)	20.0	20.0				9.0	9.0	26.0	13.0	22.0
Total Split (%)	22.2%	22.2%				10.0%	10.0%	29%	14%	24%
Yellow Time (s)	3.0	3.0				3.5	3.5	4.0	4.0	3.5
All-Red Time (s)	1.0	1.0				0.5	0.5	2.0	1.0	0.5
Lost Time Adjust (s)		-1.0				-1.0	-1.0			
Total Lost Time (s)		3.0				3.0	3.0			
Lead/Lag	Lag	Lag				Lead	Lead	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes				Yes	Yes			
Recall Mode	None	None				None	None	Min	None	None
Act Effect Green (s)		17.2	55.7	35.4		6.1	6.1			
Actuated g/C Ratio		0.24	0.77	0.49		0.08	0.08			
v/c Ratio		0.80	0.29	0.60		1.07	0.75			
Control Delay		44.7	3.7	16.7		127.3	17.5			
Queue Delay		0.0	0.0	0.9		15.6	0.0			
Total Delay		44.7	3.7	17.7		142.9	17.5			
LOS		D	A	B		F	B			
Approach Delay			13.1	17.7		62.1				
Approach LOS			B	B		E				
Queue Length 50th (ft)		123	24	163		-76	0			
Queue Length 95th (ft)		#354	129	326		#257	#117			
Internal Link Dist (ft)			1777	156		785				
Turn Bay Length (ft)		120					150			
Base Capacity (vph)		400	3734	2361		163	421			
Starvation Cap Reductn		0	0	616		0	0			
Spillback Cap Reductn		0	0	0		35	0			
Storage Cap Reductn		0	0	0		0	0			
Reduced v/c Ratio		0.80	0.29	0.81		1.36	0.75			

#### Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 72.4

Natural Cycle: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 22.3

Intersection Capacity Utilization 69.6%

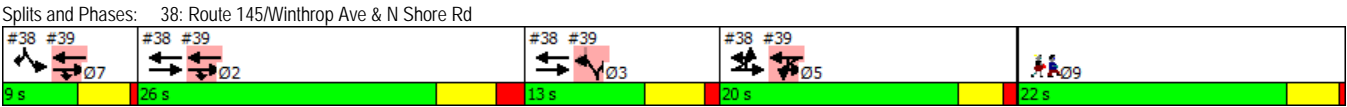
Intersection LOS: C

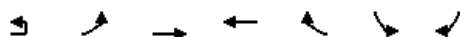
ICU Level of Service C

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.





Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↩	↩↩↩	↩↩↩		↩	↩↩
Traffic Volume (vph)	5	290	1000	1205	90	160	290
Future Volume (vph)	5	290	1000	1205	90	160	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	11	12	15	12
Total Lost time (s)		3.0	4.0	4.0		3.0	3.0
Lane Util. Factor		1.00	0.91	0.91		1.00	1.00
Frpb, ped/bikes		1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00
Frt		1.00	1.00	0.99		1.00	0.85
Flt Protected		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)		1686	4855	4807		1947	1583
Flt Permitted		0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)		1686	4855	4807		1947	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	315	1087	1310	98	174	315
RTOR Reduction (vph)	0	0	0	8	0	0	290
Lane Group Flow (vph)	0	320	1087	1400	0	174	25
Confl. Bikes (#/hr)					1		
Heavy Vehicles (%)	33%	3%	3%	3%	4%	2%	2%
Bus Blockages (#/hr)	0	0	2	0	0	0	0
Turn Type	Prot	Prot	NA	NA		Prot	Prot
Protected Phases	5	5	2 3 5	2 3		7	7
Permitted Phases							
Actuated Green, G (s)		16.2	55.6	34.4		5.1	5.1
Effective Green, g (s)		17.2	54.6	36.4		6.1	6.1
Actuated g/C Ratio		0.23	0.72	0.48		0.08	0.08
Clearance Time (s)		4.0				4.0	4.0
Vehicle Extension (s)		3.0				3.0	3.0
Lane Grp Cap (vph)		383	3506	2314		157	127
v/s Ratio Prot		c0.19	0.22	c0.29		c0.09	0.02
v/s Ratio Perm							
v/c Ratio		0.84	0.31	0.61		1.11	0.20
Uniform Delay, d1		27.9	3.8	14.3		34.8	32.5
Progression Factor		1.00	1.00	1.08		1.00	1.00
Incremental Delay, d2		14.5	0.1	0.5		103.8	0.8
Delay (s)		42.4	3.8	15.9		138.6	33.2
Level of Service		D	A	B		F	C
Approach Delay (s)			12.6	15.9		70.7	
Approach LOS			B	B		E	
<b>Intersection Summary</b>							
HCM 2000 Control Delay			22.6		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio			0.75				
Actuated Cycle Length (s)			75.6		Sum of lost time (s)		18.0
Intersection Capacity Utilization			69.6%		ICU Level of Service		C
Analysis Period (min)			15				

c Critical Lane Group

	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø2	Ø7	Ø9
Lane Configurations		↔↔	↗		↖	↔↔↔		↖↖		↗			↗			
Traffic Volume (vph)	0	955	205	5	215	1225	5	60	0	45	0	0	10			
Future Volume (vph)	0	955	205	5	215	1225	5	60	0	45	0	0	10			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Lane Width (ft)	12	11	11	12	9	11	12	10	12	12	12	12	16			
Grade (%)		0%				0%			0%			0%				
Storage Length (ft)	0		0		100		0	0		100	0		0			
Storage Lanes	0		1		1		0	1		1	0		1			
Taper Length (ft)	25				25			25			25					
Satd. Flow (prot)	0	3388	1501	0	1593	4898	0	2944	0	1615	0	0	1826			
Flt Permitted					0.950			0.950								
Satd. Flow (perm)	0	3388	1501	0	1593	4898	0	2944	0	1615	0	0	1826			
Right Turn on Red			No				Yes			No			No			
Satd. Flow (RTOR)						1										
Link Speed (mph)		30				30			30			30				
Link Distance (ft)		236				635			1415			589				
Travel Time (s)		5.4				14.4			32.2			13.4				
Confl. Peds. (#/hr)																
Confl. Bikes (#/hr)							1									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Heavy Vehicles (%)	0%	3%	4%	0%	2%	2%	0%	11%	0%	0%	2%	2%	2%			
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0	0			
Parking (#/hr)																
Mid-Block Traffic (%)		0%				0%			0%			0%				
Shared Lane Traffic (%)																
Lane Group Flow (vph)	0	1038	223	0	239	1337	0	65	0	49	0	0	11			
Turn Type		NA	Prot	Prot	Prot	NA		Prot		Prot			Perm			
Protected Phases		2 7	2 7	5	5	2 5 7		3		3				2	7	9
Permitted Phases													3			
Detector Phase		2 7	2 7	5	5	2 5 7		3		3			3			
Switch Phase																
Minimum Initial (s)				1.0	1.0			8.0		8.0			8.0	20.0	4.0	4.0
Minimum Split (s)				20.0	20.0			13.0		13.0			13.0	26.0	8.0	22.0
Total Split (s)				20.0	20.0			13.0		13.0			13.0	26.0	9.0	22.0
Total Split (%)				22.2%	22.2%			14.4%		14.4%			14.4%	29%	10%	24%
Yellow Time (s)				3.0	3.0			4.0		4.0			4.0	4.0	3.5	3.5
All-Red Time (s)				1.0	1.0			1.0		1.0			1.0	2.0	0.5	0.5
Lost Time Adjust (s)					-1.0			-1.0		-1.0			-1.0			
Total Lost Time (s)					3.0			4.0		4.0			4.0			
Lead/Lag				Lag	Lag			Lead		Lead			Lead	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes										Yes	
Recall Mode				None	None			None		None			None	Min	None	None
Act Effect Green (s)		31.4	29.4		17.2	51.0		9.1		9.1			9.1			
Actuated g/C Ratio		0.43	0.41		0.24	0.70		0.13		0.13			0.13			
v/c Ratio		0.71	0.37		0.63	0.39		0.18		0.24			0.05			
Control Delay		17.1	14.6		35.8	4.5		32.0		34.6			32.2			
Queue Delay		2.3	0.9		0.0	0.1		0.0		0.0			0.0			
Total Delay		19.4	15.5		35.8	4.5		32.0		34.6			32.2			
LOS		B	B		D	A		C		C			C			
Approach Delay		18.7				9.3			33.1			32.2				
Approach LOS		B				A			C			C				
Queue Length 50th (ft)		125	51		88	51		12		19			4			
Queue Length 95th (ft)		m#198	m78		#250	115		37		62			22			
Internal Link Dist (ft)		156				555			1335			509				
Turn Bay Length (ft)					100					100						
Base Capacity (vph)		1468	609		378	3450		370		203			229			
Starvation Cap Reductn		291	186		0	0		0		0			0			
Spillback Cap Reductn		0	0		0	518		0		0			0			
Storage Cap Reductn		0	0		0	0		0		0			0			
Reduced v/c Ratio		0.88	0.53		0.63	0.46		0.18		0.24			0.05			

#### Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 72.4

Natural Cycle: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 14.3

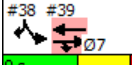

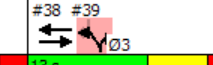


Intersection Capacity Utilization 55.3%





















Intersection LOS: B


























ICU Level of Service B

Analysis Period (min) 15  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.  
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 39: Tomasello Dr/Shaws Driveway & Winthrop Ave/Route 145

				
9 s	26 s	13 s	20 s	22 s

													
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (vph)	0	955	205	5	215	1225	5	60	0	45	0	0	10
Future Volume (vph)	0	955	205	5	215	1225	5	60	0	45	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	12	9	11	12	10	12	12	12	12	16
Total Lost time (s)		4.0	6.0		3.0	4.0		4.0		4.0			4.0
Lane Util. Factor		0.95	1.00		1.00	0.91		0.97		1.00			1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00			1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00			1.00
Frt		1.00	0.85		1.00	1.00		1.00		0.85			0.86
Flt Protected		1.00	1.00		0.95	1.00		0.95		1.00			1.00
Satd. Flow (prot)		3388	1501		1593	4900		2944		1615			1826
Flt Permitted		1.00	1.00		0.95	1.00		0.95		1.00			1.00
Satd. Flow (perm)		3388	1501		1593	4900		2944		1615			1826
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1038	223	5	234	1332	5	65	0	49	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1038	223	0	239	1337	0	65	0	49	0	0	11
Confl. Bikes (#/hr)							1						
Heavy Vehicles (%)	0%	3%	4%	0%	2%	2%	0%	11%	0%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0	0
Turn Type		NA	Prot	Prot	Prot	NA		Prot		Prot			Perm
Protected Phases		2 7	2 7	5	5	2 5 7		3		3			
Permitted Phases													3
Actuated Green, G (s)		29.4	29.4		16.2	45.6		8.1		8.1			8.1
Effective Green, g (s)		29.4	25.4		17.2	47.6		9.1		9.1			9.1
Actuated g/C Ratio		0.39	0.34		0.23	0.63		0.12		0.12			0.12
Clearance Time (s)					4.0			5.0		5.0			5.0
Vehicle Extension (s)					3.0			4.0		4.0			4.0
Lane Grp Cap (vph)		1317	504		362	3085		354		194			219
v/s Ratio Prot		c0.31	0.15		c0.15	0.27		0.02		c0.03			
v/s Ratio Perm													0.01
v/c Ratio		0.79	0.44		0.66	0.43		0.18		0.25			0.05
Uniform Delay, d1		20.4	19.6		26.5	7.1		29.9		30.2			29.4
Progression Factor		0.74	0.75		1.00	1.00		1.00		1.00			1.00
Incremental Delay, d2		3.2	0.8		4.5	0.1		0.3		0.9			0.1
Delay (s)		18.2	15.4		31.0	7.3		30.3		31.1			29.6
Level of Service		B	B		C	A		C		C			C
Approach Delay (s)		17.7				10.9			30.6			29.6	
Approach LOS		B				B			C			C	
<b>Intersection Summary</b>													
HCM 2000 Control Delay			14.6			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio			0.69										
Actuated Cycle Length (s)			75.6			Sum of lost time (s)				22.0			
Intersection Capacity Utilization			55.3%			ICU Level of Service				B			
Analysis Period (min)			15										
c Critical Lane Group													

																		
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø2					
Lane Configurations																		
Traffic Volume (vph)	40	155	20	405	285	155	25	120	240	150	550	100						
Future Volume (vph)	40	155	20	405	285	155	25	120	240	150	550	100						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900						
Lane Width (ft)	12	12	12	12	10	16	12	10	12	12	10	12						
Grade (%)		0%			0%			0%			0%							
Storage Length (ft)	0		150	250		305	0		0	0		0						
Storage Lanes	0		0	1		0	0		1	1		0						
Taper Length (ft)	25			25			25			25								
Satd. Flow (prot)	0	1371	0	1498	1459	1540	0	1436	1193	1504	1513	0						
Flt Permitted		0.850		0.950	0.991			0.249		0.541								
Satd. Flow (perm)	0	1176	0	1498	1459	1540	0	361	1193	857	1513	0						
Right Turn on Red			Yes			Yes			No			Yes						
Satd. Flow (RTOR)		3				139					6							
Link Speed (mph)		30			30			30			30							
Link Distance (ft)		1166			677			476			1736							
Travel Time (s)		26.5			15.4			10.8			39.5							
Confl. Peds. (#/hr)																		
Confl. Bikes (#/hr)																		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92						
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%						
Heavy Vehicles (%)	7%	9%	15%	3%	3%	7%	11%	10%	9%	8%	2%	9%						
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0						
Parking (#/hr)	1	1	1						1			1						
Mid-Block Traffic (%)		0%			0%			0%			0%							
Shared Lane Traffic (%)				16%														
Lane Group Flow (vph)	0	233	0	370	380	168	0	157	261	163	707	0						
Turn Type	Perm	NA		Split	NA	Prot	Perm	NA	pt+ov	D.P+P	NA							
Protected Phases		5		1	1	1		7	17	6	67		2					
Permitted Phases	5						7			7								
Detector Phase	5	5		1	1	1	7	7	17	6	67							
Switch Phase																		
Minimum Initial (s)	8.0	8.0		8.0	8.0	8.0	8.0	8.0		4.0			1.0					
Minimum Split (s)	37.0	37.0		30.0	30.0	30.0	13.0	13.0		8.0			26.0					
Total Split (s)	40.0	40.0		40.0	40.0	40.0	30.0	30.0		20.0			30.0					
Total Split (%)	25.0%	25.0%		25.0%	25.0%	25.0%	18.8%	18.8%		12.5%			19%					
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0			3.0					
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	2.0	2.0		1.0			1.0					
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		0.0		0.0								
Total Lost Time (s)		6.0		6.0	6.0	6.0		5.0		4.0								
Lead/Lag	Lead	Lead		Lead	Lead	Lead				Lag			Lag					
Lead-Lag Optimize?																		
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None			None					
Act Effect Green (s)		34.0		34.0	34.0	34.0		39.4	78.4	56.4	60.4							
Actuated g/C Ratio		0.21		0.21	0.21	0.21		0.25	0.49	0.35	0.38							
v/c Ratio		0.92		1.16	1.23	0.39		1.76	0.45	0.44	1.23							
Control Delay		100.4		155.8	177.4	15.0		422.1	32.6	42.9	159.2							
Queue Delay		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0							
Total Delay		100.4		155.8	177.4	15.0		422.1	32.6	42.9	159.2							
LOS		F		F	F	B		F	C	D	F							
Approach Delay		100.4			139.0			178.9			137.4							
Approach LOS		F			F			F			F							
Queue Length 50th (ft)		239		~481	~513	25		~269	200	132	~1017							
Queue Length 95th (ft)		#413		#704	#738	95		#428	294	203	#1272							
Internal Link Dist (ft)		1086			597			396			1656							
Turn Bay Length (ft)				250		305												
Base Capacity (vph)		252		318	310	436		89	584	367	574							
Starvation Cap Reductn		0		0	0	0		0	0	0	0							
Spillback Cap Reductn		0		0	0	0		0	0	0	0							
Storage Cap Reductn		0		0	0	0		0	0	0	0							
Reduced v/c Ratio		0.92		1.16	1.23	0.39		1.76	0.45	0.44	1.23							

#### Intersection Summary

Area Type: CBD  
Cycle Length: 160  
Actuated Cycle Length: 160  
Offset: 123 (77%), Referenced to phase 7:NBSB, Start of Green  
Natural Cycle: 145  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 1.76  
Intersection Signal Delay: 141.6

Intersection LOS: F



Intersection Capacity Utilization 85.9%

ICU Level of Service E

Analysis Period (min) 15

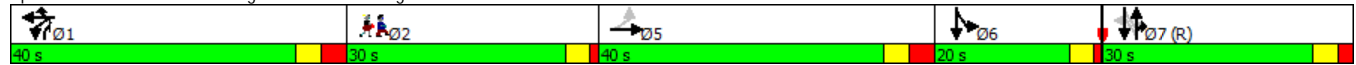
- Volume exceeds capacity, queue is theoretically infinite.





















Queue shown is maximum after two cycles.







# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 44: Bennington Street & Saratoga Street



												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	155	20	405	285	155	25	120	240	150	550	100
Future Volume (vph)	40	155	20	405	285	155	25	120	240	150	550	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	16	12	10	12	12	10	12
Total Lost time (s)		6.0		6.0	6.0	6.0		5.0	6.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		1.00	1.00	1.00	1.00	
Frt		0.99		1.00	1.00	0.85		1.00	0.85	1.00	0.98	
Flt Protected		0.99		0.95	0.99	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)		1371		1498	1459	1540		1436	1193	1504	1513	
Flt Permitted		0.85		0.95	0.99	1.00		0.25	1.00	0.54	1.00	
Satd. Flow (perm)		1176		1498	1459	1540		361	1193	857	1513	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	168	22	440	310	168	27	130	261	163	598	109
RTOR Reduction (vph)	0	2	0	0	0	109	0	0	0	0	4	0
Lane Group Flow (vph)	0	231	0	370	380	59	0	157	261	163	703	0
Heavy Vehicles (%)	7%	9%	15%	3%	3%	7%	11%	10%	9%	8%	2%	9%
Parking (#/hr)	1	1	1						1			1
Turn Type	Perm	NA		Split	NA	Prot	Perm	NA	pt+ov	D.P+P	NA	
Protected Phases		5		1	1	1		7	1 7	6	6 7	
Permitted Phases	5						7			7		
Actuated Green, G (s)		34.0		34.0	34.0	34.0		37.8	76.8	53.8	57.8	
Effective Green, g (s)		34.0		34.0	34.0	34.0		37.8	71.8	53.8	57.8	
Actuated g/C Ratio		0.21		0.21	0.21	0.21		0.24	0.45	0.34	0.36	
Clearance Time (s)		6.0		6.0	6.0	6.0		5.0		4.0		
Vehicle Extension (s)		4.0		4.0	4.0	4.0		4.0		2.0		
Lane Grp Cap (vph)		249		318	310	327		85	535	352	546	
v/s Ratio Prot				0.25	c0.26	0.04			0.22	0.05	c0.46	
v/s Ratio Perm		c0.20						c0.44		0.11		
v/c Ratio		0.93		1.16	1.23	0.18		1.85	0.49	0.46	1.29	
Uniform Delay, d1		61.8		63.0	63.0	51.6		61.1	31.1	39.7	51.1	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		40.8		102.5	126.9	1.2		422.8	3.2	0.4	142.9	
Delay (s)		102.5		165.5	189.9	52.8		483.9	34.3	40.0	194.0	
Level of Service		F		F	F	D		F	C	D	F	
Approach Delay (s)		102.5			155.0			203.2			165.2	
Approach LOS		F			F			F			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay		161.8										F
HCM 2000 Volume to Capacity ratio		1.22										
Actuated Cycle Length (s)		160.0								25.0		
Intersection Capacity Utilization		85.9%										E
Analysis Period (min)		15										
c Critical Lane Group												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	40	105	375	0	0	0	365	190	35	15	715	180	
Future Volume (vph)	40	105	375	0	0	0	365	190	35	15	715	180	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	10	12	12	12	10	11	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		50	0		0	0		0	0		0	
Storage Lanes	0		1	0		0	1		0	0		1	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1563	1319	0	0	0	1472	1587	0	0	1690	1253	
Flt Permitted		0.986					0.111				0.992		
Satd. Flow (perm)	0	1563	1319	0	0	0	172	1587	0	0	1678	1253	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			308					10				133	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		988			531			233			338		
Travel Time (s)		22.5			12.1			5.3			7.7		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	5%	9%	2%	2%	2%	2%	3%	1%	6%	6%	1%	3%	
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	2	
Parking (#/hr)									1			1	
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	157	408	0	0	0	397	245	0	0	793	196	
Turn Type	Split	NA	Prot				D,P+P	NA		Perm	NA	Perm	
Protected Phases	4	4	4				2	2 6			6		3
Permitted Phases							6			6		6	
Detector Phase	4	4	4				2	2 6		6	6	6	
Switch Phase													
Minimum Initial (s)	5.0	5.0	5.0				5.0			5.0	5.0	5.0	1.0
Minimum Split (s)	11.0	11.0	11.0				12.0			10.0	10.0	10.0	26.0
Total Split (s)	36.0	36.0	36.0				21.0			40.0	40.0	40.0	26.0
Total Split (%)	29.3%	29.3%	29.3%				17.1%			32.5%	32.5%	32.5%	21%
Yellow Time (s)	4.0	4.0	4.0				5.0			4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0				2.0			1.0	1.0	1.0	1.0
Lost Time Adjust (s)		-2.0	-2.0				-1.0				-2.0	0.0	
Total Lost Time (s)		4.0	4.0				6.0				3.0	5.0	
Lead/Lag							Lead			Lag	Lag	Lag	
Lead-Lag Optimize?													
Recall Mode	None	None	None				Min			Max	Max	Max	None
Act Effect Green (s)		20.3	20.3				49.2	55.2			37.2	35.1	
Actuated g/C Ratio		0.18	0.18				0.44	0.49			0.33	0.31	
v/c Ratio		0.55	0.83				1.58	0.31			1.42	0.40	
Control Delay		48.5	26.3				307.5	18.8			231.1	14.2	
Queue Delay		0.0	0.0				0.0	0.0			0.0	0.0	
Total Delay		48.5	26.3				307.5	18.8			231.1	14.2	
LOS		D	C				F	B			F	B	
Approach Delay		32.5						197.3			188.1		
Approach LOS		C						F			F		
Queue Length 50th (ft)		103	67				-356	92			-743	31	
Queue Length 95th (ft)		169	196				#634	185			#1137	108	
Internal Link Dist (ft)		908			451			153			258		
Turn Bay Length (ft)			50										
Base Capacity (vph)		449	598				251	789			558	485	
Starvation Cap Reductn		0	0				0	0			0	0	
Spillback Cap Reductn		0	0				0	0			0	0	
Storage Cap Reductn		0	0				0	0			0	0	
Reduced v/c Ratio		0.35	0.68				1.58	0.31			1.42	0.40	

## Intersection Summary

Area Type: CBD

Cycle Length: 123

Actuated Cycle Length: 111.7

Natural Cycle: 150

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.58

Intersection Signal Delay: 150.8

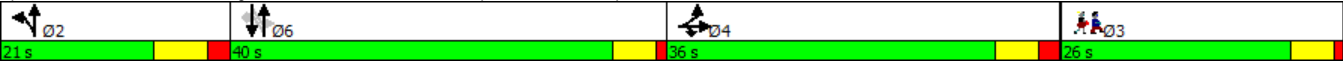
Intersection LOS: F



















Intersection Capacity Utilization 85.5%

ICU Level of Service E


















Analysis Period (min) 15  
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 46: Bennington Street/State Road & Winthrop Avenue /Winthrop Avenue



												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	105	375	0	0	0	365	190	35	15	715	180
Future Volume (vph)	40	105	375	0	0	0	365	190	35	15	715	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	10	12	12	12	10	11	12	12	12	12
Total Lost time (s)		4.0	4.0				6.0	6.0			3.0	5.0
Lane Util. Factor		1.00	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.85				1.00	0.98			1.00	0.85
Flt Protected		0.99	1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)		1563	1319				1472	1586			1690	1253
Flt Permitted		0.99	1.00				0.11	1.00			0.99	1.00
Satd. Flow (perm)		1563	1319				172	1586			1677	1253
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	114	408	0	0	0	397	207	38	16	777	196
RTOR Reduction (vph)	0	0	252	0	0	0	0	5	0	0	0	91
Lane Group Flow (vph)	0	157	156	0	0	0	397	240	0	0	793	105
Heavy Vehicles (%)	5%	9%	2%	2%	2%	2%	3%	1%	6%	6%	1%	3%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	2
Parking (#/hr)									1			1
Turn Type	Split	NA	Prot				D.P+P	NA		Perm	NA	Perm
Protected Phases	4	4	4				2	2	6		6	
Permitted Phases							6			6		6
Actuated Green, G (s)		18.3	18.3				49.2	56.2			35.1	35.1
Effective Green, g (s)		20.3	20.3				51.2	57.2			37.1	35.1
Actuated g/C Ratio		0.18	0.18				0.46	0.51			0.33	0.31
Clearance Time (s)		6.0	6.0				7.0				5.0	5.0
Vehicle Extension (s)		3.0	3.0				3.0				3.0	3.0
Lane Grp Cap (vph)		284	239				254	812			557	394
v/s Ratio Prot		0.10	c0.12				c0.21	0.15				
v/s Ratio Perm							c0.50				0.47	0.08
v/c Ratio		0.55	0.65				1.56	0.30			1.42	0.27
Uniform Delay, d1		41.5	42.4				32.9	15.6			37.2	28.6
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		2.3	6.3				271.7	0.2			201.0	1.6
Delay (s)		43.8	48.6				304.6	15.8			238.2	30.3
Level of Service		D	D				F	B			F	C
Approach Delay (s)		47.3			0.0			194.4			197.0	
Approach LOS		D			A			F			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			157.7				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			1.00									
Actuated Cycle Length (s)			111.6				Sum of lost time (s)			19.0		
Intersection Capacity Utilization			85.5%				ICU Level of Service			E		
Analysis Period (min)			15									

c Critical Lane Group

												
Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL2	SBL	SBR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (vph)	15	355	635	445	5	5	15	10	25	0	980	10
Future Volume (vph)	15	355	635	445	5	5	15	10	25	0	980	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%	0%				0%		0%		
Storage Length (ft)		0			0			0	0	0	0	
Storage Lanes		2			0			1	0	0	3	
Taper Length (ft)		25						25		25		
Satd. Flow (prot)	0	3401	1845	3527	0	0	0	1694	0	0	3610	0
Flt Permitted		0.926						0.976				
Satd. Flow (perm)	0	3315	1845	3527	0	0	0	1694	0	0	3610	0
Right Turn on Red						Yes			Yes			Yes
Satd. Flow (RTOR)				1				127			127	
Link Speed (mph)			30	30				30		30		
Link Distance (ft)			635	988				259		1471		
Travel Time (s)			14.4	22.5				5.9		33.4		
Confl. Peds. (#/hr)		8				8				4		
Confl. Bikes (#/hr)											1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%	0%				0%		0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	402	690	494	0	0	0	54	0	0	1076	0
Turn Type	Prot	Split	NA	NA			Prot	Prot			Prot	
Protected Phases	1	6	6	3			4	4			2	
Permitted Phases												
Detector Phase	1	6	6	3			4	4			2	
Switch Phase												
Minimum Initial (s)	10.0	4.0	4.0	10.0			4.0	4.0			4.0	
Minimum Split (s)	15.0	22.0	22.0	22.5			22.0	22.0			20.0	
Total Split (s)	15.0	45.5	45.5	22.5			22.0	22.0			30.5	
Total Split (%)	16.7%	50.6%	50.6%	25.0%			24.4%	24.4%			33.9%	
Yellow Time (s)	4.0	3.5	3.5	3.5			3.5	3.5			3.5	
All-Red Time (s)	1.0	0.5	0.5	1.0			0.5	0.5			0.5	
Lost Time Adjust (s)		0.0	0.0	0.0				0.0			0.0	
Total Lost Time (s)		4.0	4.0	4.5				4.0			4.0	
Lead/Lag	Lag			Lag			Lead	Lead			Lead	
Lead-Lag Optimize?							Yes	Yes				
Recall Mode	Min	None	None	None			None	None			None	
Act Effect Green (s)		39.8	39.8	15.6				5.6			24.4	
Actuated g/C Ratio		0.58	0.58	0.23				0.08			0.35	
v/c Ratio		0.34	0.65	0.62				0.21			0.79	
Control Delay		11.2	15.2	28.9				1.9			23.9	
Queue Delay		0.0	0.0	0.0				0.0			0.0	
Total Delay		11.2	15.2	28.9				1.9			23.9	
LOS		B	B	C				A			C	
Approach Delay			13.8	28.9				1.9		23.9		
Approach LOS			B	C				A		C		
Queue Length 50th (ft)		47	226	112				0			180	
Queue Length 95th (ft)		72	356	161				0			247	
Internal Link Dist (ft)			555	908				179		1391		
Turn Bay Length (ft)												
Base Capacity (vph)		1238	1133	940				544			1493	
Starvation Cap Reductn		0	0	0				0			0	
Spillback Cap Reductn		0	0	0				0			0	
Storage Cap Reductn		0	0	0				0			0	
Reduced v/c Ratio		0.32	0.61	0.53				0.10			0.72	

## Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 69.2

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 20.3

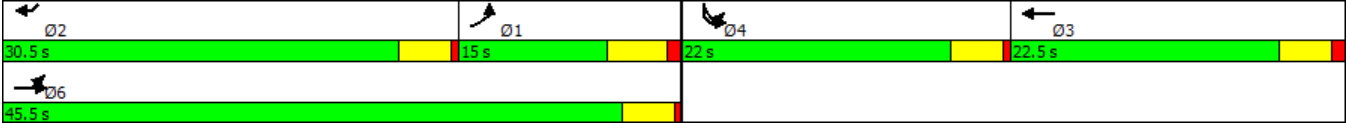
Intersection LOS: C


















Intersection Capacity Utilization 57.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 48: Route 145/Winthrop Avenue & Shaw's Site Driveway & Revere Beach Pkwy



												
Movement	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL2	SBL	SBR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (vph)	15	355	635	445	5	5	15	10	25	0	980	10
Future Volume (vph)	15	355	635	445	5	5	15	10	25	0	980	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.5				4.0			4.0	
Lane Util. Factor		0.97	1.00	0.95				1.00			0.76	
Frbp, ped/bikes		1.00	1.00	1.00				1.00			1.00	
Flpb, ped/bikes		1.00	1.00	1.00				1.00			1.00	
Frt		1.00	1.00	1.00				0.93			0.85	
Flt Protected		0.95	1.00	1.00				0.98			1.00	
Satd. Flow (prot)		3397	1845	3527				1695			3610	
Flt Permitted		0.93	1.00	1.00				0.98			1.00	
Satd. Flow (perm)		3311	1845	3527				1695			3610	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	386	690	484	5	5	16	11	27	0	1065	11
RTOR Reduction (vph)	0	0	0	1	0	0	0	52	0	0	83	0
Lane Group Flow (vph)	0	402	690	493	0	0	0	2	0	0	993	0
Confl. Peds. (#/hr)		8				8				4		
Confl. Bikes (#/hr)											1	
Heavy Vehicles (%)	2%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	Split	NA	NA			Prot	Prot			Prot	
Protected Phases	1	6	6	3			4	4			2	
Permitted Phases												
Actuated Green, G (s)		39.8	39.8	15.6				3.0			24.4	
Effective Green, g (s)		39.8	39.8	15.6				3.0			24.4	
Actuated g/C Ratio		0.56	0.56	0.22				0.04			0.34	
Clearance Time (s)		4.0	4.0	4.5				4.0			4.0	
Vehicle Extension (s)		3.0	3.0	4.0				3.0			3.0	
Lane Grp Cap (vph)		1871	1035	776				71			1242	
v/s Ratio Prot		0.03	c0.37	c0.14				c0.00			c0.27	
v/s Ratio Perm		0.09										
v/c Ratio		0.21	0.67	0.64				0.03			0.80	
Uniform Delay, d1		14.4	10.9	25.1				32.6			21.0	
Progression Factor		1.00	1.00	1.00				1.00			1.00	
Incremental Delay, d2		0.1	1.6	1.9				0.2			3.7	
Delay (s)		14.5	12.5	27.0				32.7			24.7	
Level of Service		B	B	C				C			C	
Approach Delay (s)			13.3	27.0				32.7		24.7		
Approach LOS			B	C				C		C		
Intersection Summary												
HCM 2000 Control Delay			20.7		HCM 2000 Level of Service						C	
HCM 2000 Volume to Capacity ratio			0.73									
Actuated Cycle Length (s)			70.9		Sum of lost time (s)						17.5	
Intersection Capacity Utilization			57.3%		ICU Level of Service						B	
Analysis Period (min)			15									
c Critical Lane Group												

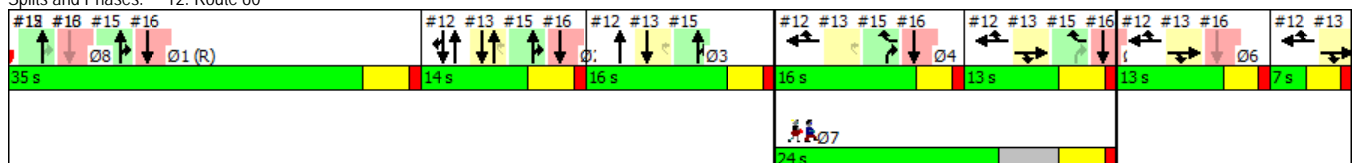


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø2	Ø3	Ø4
Lane Configurations					↕↕	↗		↕↕			↕↕	↗				
Traffic Volume (vph)	0	0	0	0	1030	285	0	695	0	0	925	345				
Future Volume (vph)	0	0	0	0	1030	285	0	695	0	0	925	345				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Satd. Flow (prot)	0	0	0	0	3406	1538	0	3282	0	0	3343	1524				
Flt Permitted																
Satd. Flow (perm)	0	0	0	0	3406	1538	0	3282	0	0	3343	1524				
Right Turn on Red			Yes			Yes			Yes			Yes				
Satd. Flow (RTOR)						166						312				
Link Speed (mph)		30			30			30			30					
Link Distance (ft)		244			245			403			338					
Travel Time (s)		5.5			5.6			9.2			7.7					
Confl. Peds. (#/hr)						19										
Confl. Bikes (#/hr)						1										
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92				
Heavy Vehicles (%)	2%	2%	2%	2%	6%	5%	2%	10%	2%	2%	8%	6%				
Shared Lane Traffic (%)																
Lane Group Flow (vph)	0	0	0	0	1120	310	0	755	0	0	1005	375				
Turn Type					NA	Prot		NA			NA	Prot				
Protected Phases					4 5 6 8	4 5 6 8		1 2 3			1 2	1 2	1	2	3	4
Permitted Phases																
Minimum Split (s)													10.0	19.0	16.0	16.0
Total Split (s)													35.0	14.0	16.0	16.0
Total Split (%)													31%	12%	14%	14%
Yellow Time (s)													4.0	4.0	3.0	3.0
All-Red Time (s)													1.0	1.0	1.0	1.0
Lost Time Adjust (s)																
Total Lost Time (s)																
Lead/Lag													Lead	Lag		Lead
Lead-Lag Optimize?																
Act Effct Green (s)					45.0	45.0		60.0			44.0	44.0				
Actuated g/C Ratio					0.39	0.39		0.53			0.39	0.39				
v/c Ratio					0.83	0.44		0.44			0.78	0.48				
Control Delay					41.8	16.7		0.6			35.9	7.3				
Queue Delay					49.6	3.7		0.1			0.0	0.0				
Total Delay					91.4	20.4		0.8			35.9	7.3				
LOS					F	C		A			D	A				
Approach Delay					76.0			0.8			28.1					
Approach LOS					E			A			C					
Queue Length 50th (ft)					421	85		0			336	29				
Queue Length 95th (ft)					511	m110		0			420	104				
Internal Link Dist (ft)		164			165			323			258					
Turn Bay Length (ft)																
Base Capacity (vph)					1344	707		1727			1290	779				
Starvation Cap Reductn					556	305		203			0	0				
Spillback Cap Reductn					0	0		0			0	0				
Storage Cap Reductn					0	0		0			0	0				
Reduced v/c Ratio					1.42	0.77		0.50			0.78	0.48				













#### Intersection Summary

Area Type:	Other
Cycle Length: 114	
Actuated Cycle Length: 114	
Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green	
Natural Cycle: 120	
Control Type: Pretimed	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 41.5	Intersection LOS: D
Intersection Capacity Utilization 61.5%	ICU Level of Service B
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

#### Splits and Phases: 12: Route 60



Lane Group	Ø5	Ø6	Ø7	Ø8
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	5	6	7	8
Permitted Phases				
Minimum Split (s)	13.0	13.0	24.0	9.0
Total Split (s)	13.0	13.0	24.0	7.0
Total Split (%)	11%	11%	21%	6%
Yellow Time (s)	4.0	3.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead		Lag
Lead-Lag Optimize?				
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				
Intersection Summary				

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↗		↑↑			↑↑	↗
Traffic Volume (vph)	0	0	0	0	1030	285	0	695	0	0	925	345
Future Volume (vph)	0	0	0	0	1030	285	0	695	0	0	925	345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		5.0			5.0	5.0
Lane Util. Factor					0.95	1.00		0.95			0.95	1.00
Frbp, ped/bikes					1.00	1.00		1.00			1.00	1.00
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					3406	1538		3282			3343	1524
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					3406	1538		3282			3343	1524
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1120	310	0	755	0	0	1005	375
RTOR Reduction (vph)	0	0	0	0	0	108	0	0	0	0	0	192
Lane Group Flow (vph)	0	0	0	0	1120	202	0	755	0	0	1005	183
Confl. Peds. (#/hr)						19						
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	2%	2%	2%	2%	6%	5%	2%	10%	2%	2%	8%	6%
Turn Type					NA	Prot		NA			NA	Prot
Protected Phases					4 5 6 8	4 5 6 8		1 2 3			1 2	1 2
Permitted Phases												
Actuated Green, G (s)					45.0	45.0		61.0			44.0	44.0
Effective Green, g (s)					40.0	40.0		61.0			44.0	44.0
Actuated g/C Ratio					0.35	0.35		0.54			0.39	0.39
Clearance Time (s)												
Lane Grp Cap (vph)					1195	539		1756			1290	588
v/s Ratio Prot					c0.33	0.13		c0.23			c0.30	0.12
v/s Ratio Perm												
v/c Ratio					0.94	0.38		0.43			0.78	0.31
Uniform Delay, d1					35.8	27.7		16.0			30.7	24.4
Progression Factor					1.17	1.34		0.00			1.00	1.00
Incremental Delay, d2					11.9	1.5		0.6			4.7	1.4
Delay (s)					53.9	38.5		0.6			35.4	25.8
Level of Service					D	D		A			D	C
Approach Delay (s)		0.0			50.6			0.6			32.8	
Approach LOS		A			D			A			C	
Intersection Summary												
HCM 2000 Control Delay			33.1		HCM 2000 Level of Service						C	
HCM 2000 Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			114.0		Sum of lost time (s)						31.0	
Intersection Capacity Utilization			61.5%		ICU Level of Service						B	
Analysis Period (min)			15									
c Critical Lane Group												

	→	↘	↑	↗	↓	↖							
Lane Group	EBT	EBR2	NBT	NBR	SBT	NWR2	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations	↑↑	↑↑	↑↑	↑	↑↑	↑↑							
Traffic Volume (vph)	535	905	695	385	925	615							
Future Volume (vph)	535	905	695	385	925	615							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900							
Storage Length (ft)				100									
Storage Lanes				1									
Taper Length (ft)													
Satd. Flow (prot)	3406	2707	3252	1482	3343	2760							
Flt Permitted													
Satd. Flow (perm)	3406	2707	3252	1482	3343	2760							
Right Turn on Red		Yes				Yes							
Satd. Flow (RTOR)		488				174							
Link Speed (mph)	30		30		30								
Link Distance (ft)	272		380		403								
Travel Time (s)	6.2		8.6		9.2								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92							
Heavy Vehicles (%)	6%	5%	11%	9%	8%	3%							
Shared Lane Traffic (%)													
Lane Group Flow (vph)	582	984	755	418	1005	668							
Turn Type	NA	Prot	NA	custom	NA	Perm							
Protected Phases	5 6 8	5 6 8	1 2	1	1 2 3		2	3	4	5	6	7	8
Permitted Phases						2 3 4							
Minimum Split (s)				10.0			19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)				35.0			14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)				30.7%			12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)				4.0			4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)				1.0			1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)				0.0									
Total Lost Time (s)				5.0									
Lead/Lag				Lead			Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?													
Act Effect Green (s)	28.0	28.0	44.0	30.0	60.0	41.0							
Actuated g/C Ratio	0.25	0.25	0.39	0.26	0.53	0.36							
v/c Ratio	0.70	0.95	0.60	1.07	0.57	0.61							
Control Delay	31.7	28.4	30.5	106.9	0.8	24.2							
Queue Delay	12.2	4.9	0.0	0.0	0.2	0.0							
Total Delay	43.9	33.3	30.5	106.9	1.1	24.2							
LOS	D	C	C	F	A	C							
Approach Delay	37.3		57.7		1.1								
Approach LOS	D		E		A								
Queue Length 50th (ft)	141	26	230	~341	0	167							
Queue Length 95th (ft)	228	#320	294	#537	0	235							
Internal Link Dist (ft)	192		300		323								
Turn Bay Length (ft)				100									
Base Capacity (vph)	836	1033	1255	390	1759	1104							
Starvation Cap Reductn	234	35	0	0	199	0							
Spillback Cap Reductn	0	0	0	0	0	0							
Storage Cap Reductn	0	0	0	0	0	0							
Reduced v/c Ratio	0.97	0.99	0.60	1.07	0.64	0.61							

#### Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 32.5

Intersection LOS: C

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

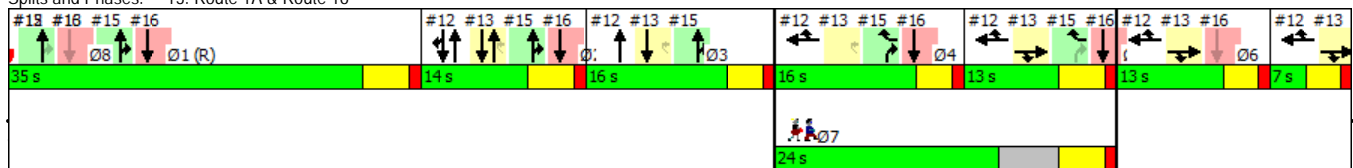
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 13: Route 1A & Route 16



	→	↘	↑	↗	↓	↖
Movement	EBT	EBR2	NBT	NBR	SBT	NWR2
Lane Configurations	↑↑	↗↗	↑↑	↗	↑↑	↗↗
Traffic Volume (vph)	535	905	695	385	925	615
Future Volume (vph)	535	905	695	385	925	615
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.95	0.88	0.95	1.00	0.95	0.88
Frt	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)	3406	2707	3252	1482	3343	2760
Flt Permitted	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (perm)	3406	2707	3252	1482	3343	2760
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	582	984	755	418	1005	668
RTOR Reduction (vph)	0	381	0	0	0	116
Lane Group Flow (vph)	582	603	755	418	1005	552
Heavy Vehicles (%)	6%	5%	11%	9%	8%	3%
Turn Type	NA	Prot	NA	custom	NA	Perm
Protected Phases	5 6 8	5 6 8	1 2	1	1 2 3	
Permitted Phases						2 3 4
Actuated Green, G (s)	29.0	29.0	44.0	30.0	61.0	42.0
Effective Green, g (s)	25.0	25.0	44.0	30.0	61.0	38.0
Actuated g/C Ratio	0.22	0.22	0.39	0.26	0.54	0.33
Clearance Time (s)				5.0		
Lane Grp Cap (vph)	746	593	1255	390	1788	920
v/s Ratio Prot	0.17	c0.22	0.23	c0.28	c0.30	
v/s Ratio Perm						c0.20
v/c Ratio	0.78	1.02	0.60	1.07	0.56	0.60
Uniform Delay, d1	41.9	44.5	28.0	42.0	17.6	31.7
Progression Factor	0.69	0.41	1.00	1.00	0.00	1.00
Incremental Delay, d2	7.5	40.2	2.1	66.0	0.8	2.9
Delay (s)	36.4	58.4	30.1	108.0	0.8	34.6
Level of Service	D	E	C	F	A	C
Approach Delay (s)	50.2		57.9		0.8	
Approach LOS	D		E		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay			38.6		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.98			
Actuated Cycle Length (s)			114.0		Sum of lost time (s)	31.0
Intersection Capacity Utilization			Err%		ICU Level of Service	H
Analysis Period (min)			15			
c Critical Lane Group						

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations		↔↔	↕↕	↔↔										
Traffic Volume (vph)	0	1005	370	1165	0	0								
Future Volume (vph)	0	1005	370	1165	0	0								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Satd. Flow (prot)	0	2707	3406	2707	0	0								
Flt Permitted														
Satd. Flow (perm)	0	2707	3406	2707	0	0								
Right Turn on Red		Yes		Yes										
Satd. Flow (RTOR)		956		1266										
Link Speed (mph)	30		30			30								
Link Distance (ft)	507		317			245								
Travel Time (s)	11.5		7.2			5.6								
Confl. Peds. (#/hr)		9												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	2%	5%	6%	5%	2%	2%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	1092	402	1266	0	0								
Turn Type		custom	NA	custom										
Protected Phases		4 5	1 2 3 8	1 2 3 4			1	2	3	4	5	6	7	8
Permitted Phases				5 8										
Minimum Split (s)							10.0	19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)							35.0	14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)							31%	12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)							4.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)														
Total Lost Time (s)														
Lead/Lag							Lead	Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?														
Act Effect Green (s)		25.0	67.0	96.0										
Actuated g/C Ratio		0.22	0.59	0.84										
v/c Ratio		0.82	0.20	0.51										
Control Delay		11.5	8.7	2.8										
Queue Delay		48.7	0.7	0.6										
Total Delay		60.2	9.4	3.4										
LOS		E	A	A										
Approach Delay	60.2		4.8											
Approach LOS	E		A											
Queue Length 50th (ft)		47	64	0										
Queue Length 95th (ft)		141	m90	m109										
Internal Link Dist (ft)	427		237			165								
Turn Bay Length (ft)														
Base Capacity (vph)		1339	2001	2479										
Starvation Cap Reductn		0	1238	727										
Spillback Cap Reductn		364	800	0										
Storage Cap Reductn		0	0	0										
Reduced v/c Ratio		1.12	0.53	0.72										

#### Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 26.7

Intersection LOS: C

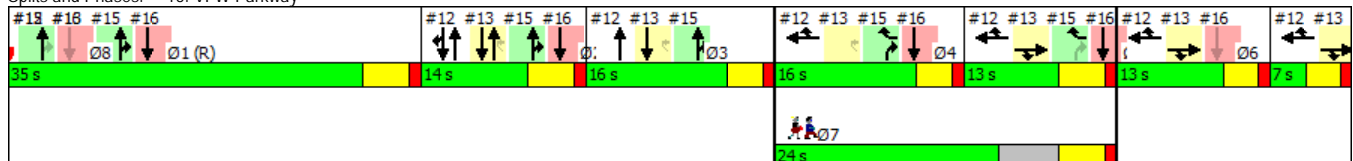
Intersection Capacity Utilization 53.8%


ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 15: VFW Parkway



						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗↘	↗↘	↗↘		
Traffic Volume (vph)	0	1005	370	1165	0	0
Future Volume (vph)	0	1005	370	1165	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.0	5.0		
Lane Util. Factor		0.88	0.95	0.88		
Flpb, ped/bikes		1.00	1.00	1.00		
Flpb, ped/bikes		1.00	1.00	1.00		
Frt		0.85	1.00	0.85		
Flt Protected		1.00	1.00	1.00		
Satd. Flow (prot)		2707	3406	2707		
Flt Permitted		1.00	1.00	1.00		
Satd. Flow (perm)		2707	3406	2707		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1092	402	1266	0	0
RTOR Reduction (vph)	0	755	0	333	0	0
Lane Group Flow (vph)	0	337	402	933	0	0
Confl. Peds. (#/hr)		9				
Heavy Vehicles (%)	2%	5%	6%	5%	2%	2%
Turn Type		custom	NA	custom		
Protected Phases		4 5	1 2 3 8	1 2 3 4		
Permitted Phases				5 8		
Actuated Green, G (s)		24.0	68.0	88.0		
Effective Green, g (s)		24.0	64.0	84.0		
Actuated g/C Ratio		0.21	0.56	0.74		
Clearance Time (s)						
Lane Grp Cap (vph)		569	1912	1994		
v/s Ratio Prot		c0.12	0.12	c0.30		
v/s Ratio Perm				0.05		
v/c Ratio		0.59	0.21	0.47		
Uniform Delay, d1		40.6	12.4	6.0		
Progression Factor		1.00	0.77	24.65		
Incremental Delay, d2		4.5	0.2	0.5		
Delay (s)		45.1	9.8	149.0		
Level of Service		D	A	F		
Approach Delay (s)	45.1		115.4		0.0	
Approach LOS	D		F		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		87.6		HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio		0.53				
Actuated Cycle Length (s)		114.0		Sum of lost time (s)	31.0	
Intersection Capacity Utilization		53.8%		ICU Level of Service	A	
Analysis Period (min)		15				
c Critical Lane Group						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations		↗		↑	↕	↘								
Traffic Volume (vph)	0	380	0	0	1060	315								
Future Volume (vph)	0	380	0	0	1060	315								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Satd. Flow (prot)	0	1565	0	0	3438	1509								
Flt Permitted														
Satd. Flow (perm)	0	1536	0	0	3438	1467								
Right Turn on Red		Yes				Yes								
Satd. Flow (RTOR)		295				196								
Link Speed (mph)	30			30	30									
Link Distance (ft)	572			272	244									
Travel Time (s)	13.0			6.2	5.5									
Confl. Peds. (#/hr)		23				17								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	2%	5%	2%	2%	5%	7%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	413	0	0	1152	342								
Turn Type		Free			NA	Free								
Protected Phases				1 2 4 5			1	2	3	4	5	6	7	8
Permitted Phases		Free			6 8	Free								
Minimum Split (s)							10.0	19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)							35.0	14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)							31%	12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)							4.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)														
Total Lost Time (s)														
Lead/Lag							Lead	Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?														
Act Effect Green (s)		114.0			93.0	114.0								
Actuated g/C Ratio		1.00			0.82	1.00								
v/c Ratio		0.27			0.41	0.23								
Control Delay		0.4			0.8	0.2								
Queue Delay		0.0			0.5	0.0								
Total Delay		0.4			1.3	0.2								
LOS		A			A	A								
Approach Delay	0.4				1.0									
Approach LOS	A				A									
Queue Length 50th (ft)		0			15	0								
Queue Length 95th (ft)		0			14	m0								
Internal Link Dist (ft)	492			192	164									
Turn Bay Length (ft)														
Base Capacity (vph)		1536			2804	1467								
Starvation Cap Reductn		0			1104	0								
Spillback Cap Reductn		30			67	0								
Storage Cap Reductn		0			0	0								
Reduced v/c Ratio		0.27			0.68	0.23								

#### Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 0.9

Intersection LOS: A

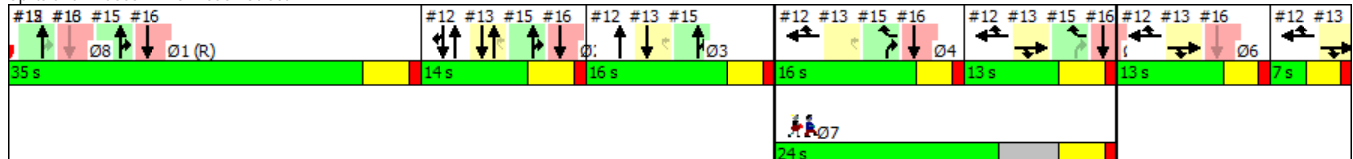
Intersection Capacity Utilization 45.5%

ICU Level of Service A










Analysis Period (min) 15










m Volume for 95th percentile queue is metered by upstream signal.










Splits and Phases: 16: Beach Street

































						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	380	0	0	1060	315
Future Volume (vph)	0	380	0	0	1060	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			5.0	4.0
Lane Util. Factor		1.00			0.95	1.00
Frbp, ped/bikes		0.98			1.00	0.97
Flpb, ped/bikes		1.00			1.00	1.00
Frt		0.86			1.00	0.85
Flt Protected		1.00			1.00	1.00
Satd. Flow (prot)		1536			3438	1467
Flt Permitted		1.00			1.00	1.00
Satd. Flow (perm)		1536			3438	1467
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	413	0	0	1152	342
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	413	0	0	1152	342
Confl. Peds. (#/hr)		23				17
Heavy Vehicles (%)	2%	5%	2%	2%	5%	7%
Turn Type		Free			NA	Free
Protected Phases					1 2 4 5	
Permitted Phases		Free			6 8	Free
Actuated Green, G (s)		114.0			84.0	114.0
Effective Green, g (s)		114.0			76.0	114.0
Actuated g/C Ratio		1.00			0.67	1.00
Clearance Time (s)						
Lane Grp Cap (vph)		1536			2442	1467
v/s Ratio Prot					c0.26	
v/s Ratio Perm		c0.27			0.07	0.23
v/c Ratio		0.27			0.47	0.23
Uniform Delay, d1		0.0			9.2	0.0
Progression Factor		1.00			0.16	1.00
Incremental Delay, d2		0.4			0.4	0.2
Delay (s)		0.4			1.9	0.2
Level of Service		A			A	A
Approach Delay (s)	0.4			0.0	1.5	
Approach LOS	A			A	A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		1.3			HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio		0.52				
Actuated Cycle Length (s)		114.0			Sum of lost time (s)	31.0
Intersection Capacity Utilization		45.5%			ICU Level of Service	A
Analysis Period (min)		15				
c Critical Lane Group						










						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	135	1350	70	0	2600
Future Volume (vph)	0	135	1350	70	0	2600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1774	3270	0	0	3438
Flt Permitted						
Satd. Flow (perm)	0	1774	3270	0	0	3438
Link Speed (mph)	30		30			30
Link Distance (ft)	1034		925			475
Travel Time (s)	23.5		21.0			10.8
Confl. Peds. (#/hr)				1	1	
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	9%	22%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	147	1543	0	0	2826
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	75.2%			ICU Level of Service D		
Analysis Period (min)	15					











						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	135	1350	70	0	2600
Future Volume (Veh/h)	0	135	1350	70	0	2600
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	147	1467	76	0	2826
Pedestrians	1					
Lane Width (ft)	16.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			925			880
pX, platoon unblocked	0.46	0.75			0.75	
vC, conflicting volume	2919	772			1544	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	387	44			1068	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	81			100	
cM capacity (veh/h)	270	758			497	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	147	978	565	1413	1413	
Volume Left	0	0	0	0	0	
Volume Right	147	0	76	0	0	
cSH	758	1700	1700	1700	1700	
Volume to Capacity	0.19	0.58	0.33	0.83	0.83	
Queue Length 95th (ft)	18	0	0	0	0	
Control Delay (s)	10.9	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.9	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			75.2%	ICU Level of Service		D
Analysis Period (min)			15			

							
Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	210	15	55	1230	200	25	2335
Future Volume (vph)	210	15	55	1230	200	25	2335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	11	11	11	11
Grade (%)	0%			0%			0%
Storage Length (ft)	0	0	0		0	150	
Storage Lanes	1	1	0		0	1	
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1888	1595	0	3147	0	1745	3323
Flt Permitted	0.950			0.998		0.950	
Satd. Flow (perm)	1888	1595	0	3147	0	1745	3323
Link Speed (mph)	30			30			30
Link Distance (ft)	3577			475			405
Travel Time (s)	81.3			10.8			9.2
Confl. Peds. (#/hr)		2			2	2	
Confl. Bikes (#/hr)							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	8%	2%	8%	13%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%			0%
Shared Lane Traffic (%)							
Lane Group Flow (vph)	228	16	0	1614	0	27	2538
Sign Control	Stop			Free			Free
<b>Intersection Summary</b>							
Area Type:	Other						
Control Type:	Unsignalized						
Intersection Capacity Utilization 99.8%	ICU Level of Service F						
Analysis Period (min)	15						











							
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	210	15	55	1230	200	25	2335
Future Volume (Veh/h)	210	15	55	1230	200	25	2335
Sign Control	Stop			Free			Free
Grade	0%			0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	228	16	0	1337	217	27	2538
Pedestrians	2						2
Lane Width (ft)	14.0						11.0
Walking Speed (ft/s)	4.0						4.0
Percent Blockage	0						0
Right turn flare (veh)							
Median type				None			None
Median storage (veh)							
Upstream signal (ft)							405
pX, platoon unblocked	0.32		0.00				
vC, conflicting volume	2770	781	0			1556	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2274	781	0			1556	
tC, single (s)	6.8	7.1	0.0			4.1	
tC, 2 stage (s)							
tF (s)	3.5	3.4	0.0			2.2	
p0 queue free %	0	95	0			94	
cM capacity (veh/h)	10	324	0			430	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	228	16	891	663	27	1269	1269
Volume Left	228	0	0	0	27	0	0
Volume Right	0	16	0	217	0	0	0
cSH	10	324	1700	1700	430	1700	1700
Volume to Capacity	22.75	0.05	0.52	0.39	0.06	0.75	0.75
Queue Length 95th (ft)	Err	4	0	0	5	0	0
Control Delay (s)	Err	16.7	0.0	0.0	13.9	0.0	0.0
Lane LOS	F	C			B		
Approach Delay (s)	9344.4		0.0		0.1		
Approach LOS	F						
Intersection Summary							
Average Delay			522.7				
Intersection Capacity Utilization			99.8%		ICU Level of Service		F
Analysis Period (min)			15				























						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	40	1265	35	0	2445
Future Volume (vph)	0	40	1265	35	0	2445
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	11	11	11	11
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1514	3159	0	0	3292
Flt Permitted						
Satd. Flow (perm)	0	1514	3159	0	0	3292
Link Speed (mph)	30		30			30
Link Distance (ft)	911		2394			546
Travel Time (s)	20.7		54.4			12.4
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	23%	10%	11%	0%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	43	1413	0	0	2658
Sign Control	Stop		Free			Free
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 70.9%	ICU Level of Service C					
Analysis Period (min) 15						

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	40	1265	35	0	2445
Future Volume (Veh/h)	0	40	1265	35	0	2445
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	43	1375	38	0	2658
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2723	706			1413	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2723	706			1413	
tC, single (s)	6.8	7.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.5			2.2	
p0 queue free %	100	87			100	
cM capacity (veh/h)	17	333			489	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	43	917	496	1329	1329	
Volume Left	0	0	0	0	0	
Volume Right	43	0	38	0	0	
cSH	333	1700	1700	1700	1700	
Volume to Capacity	0.13	0.54	0.29	0.78	0.78	
Queue Length 95th (ft)	11	0	0	0	0	
Control Delay (s)	17.4	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	17.4	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			70.9%		ICU Level of Service	C
Analysis Period (min)			15			

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	185	300	290	5	5	1085
Future Volume (vph)	185	300	290	5	5	1085
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1599	1403	3533	0	0	3354
Flt Permitted	0.950					
Satd. Flow (perm)	1599	1403	3533	0	0	3354
Link Speed (mph)	30		30			30
Link Distance (ft)	817		1471			233
Travel Time (s)	18.6		33.4			5.3
Confl. Peds. (#/hr)	1	1		84		
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	3%	2%	0%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	1	1		1		1
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	201	326	320	0	0	1184
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	50.5%			ICU Level of Service A		
Analysis Period (min)	15					



						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	185	300	290	5	5	1085
Future Volume (Veh/h)	185	300	290	5	5	1085
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	201	326	315	5	5	1179
Pedestrians	84		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	7		0			0
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						233
pX, platoon unblocked						
vC, conflicting volume	1002	245			404	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1002	245			404	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	10	53			100	
cM capacity (veh/h)	223	699			1084	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	201	326	210	110	398	786
Volume Left	201	0	0	0	5	0
Volume Right	0	326	0	5	0	0
cSH	223	699	1700	1700	1084	1700
Volume to Capacity	0.90	0.47	0.12	0.06	0.00	0.46
Queue Length 95th (ft)	186	62	0	0	0	0
Control Delay (s)	83.2	14.6	0.0	0.0	0.2	0.0
Lane LOS	F	B			A	
Approach Delay (s)	40.7		0.0		0.1	
Approach LOS	E					
Intersection Summary						
Average Delay			10.6			
Intersection Capacity Utilization			50.5%		ICU Level of Service	A
Analysis Period (min)			15			

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (vph)	80	15	85	230	25	240	40	50	2370	140	205	1665	20
Future Volume (vph)	80	15	85	230	25	240	40	50	2370	140	205	1665	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	12	12	10	10	12	11	11	11	11	11	12
Grade (%)		0%			0%				0%			0%	
Storage Length (ft)	130		0	0		250		400		500	380		0
Storage Lanes	1		0	0		1		1		1	1		0
Taper Length (ft)	25			25				25			25		
Satd. Flow (prot)	1668	1475	0	0	1624	1436	0	1447	3355	1546	1728	3261	0
Flt Permitted	0.154				0.506			0.950			0.950		
Satd. Flow (perm)	270	1475	0	0	859	1436	0	1446	3355	1546	1728	3261	0
Right Turn on Red			Yes			No				Yes			Yes
Satd. Flow (RTOR)		92								122		1	
Link Speed (mph)		30			30				30			30	
Link Distance (ft)		537			1355				733			925	
Travel Time (s)		12.2			30.8				16.7			21.0	
Confl. Peds. (#/hr)	7					7		1					1
Confl. Bikes (#/hr)													1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	6%	9%	5%	0%	5%	0%	37%	4%	1%	1%	5%	11%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	8	0
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%				0%			0%	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	87	108	0	0	277	261	0	97	2576	152	223	1832	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases		8			4	4 5	1	1	6	6	5	2	
Permitted Phases	8			4									
Detector Phase	8	8		4	4	4 5	1	1	6	6	5	2	
Switch Phase													
Minimum Initial (s)	6.0	6.0		6.0	6.0		6.0	6.0	20.0	20.0	6.0	20.0	
Minimum Split (s)	26.0	26.0		12.0	12.0		12.0	12.0	27.0	27.0	13.5	31.0	
Total Split (s)	31.0	31.0		18.0	18.0		31.0	31.0	137.0	137.0	32.5	137.0	
Total Split (%)	15.5%	15.5%		9.0%	9.0%		15.5%	15.5%	68.3%	68.3%	16.2%	68.3%	
Yellow Time (s)	3.0	3.0		4.0	4.0		4.0	4.0	5.0	5.0	5.5	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	5.0	5.0			6.0			5.0	6.0	6.0	6.5	6.0	
Lead/Lag							Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?													
Recall Mode	None	None		None	None		None	None	Min	Min	None	Min	
Act Efect Green (s)	26.0	26.0			25.0	57.5		18.8	131.0	131.0	26.0	139.7	
Actuated g/C Ratio	0.13	0.13			0.12	0.29		0.09	0.65	0.65	0.13	0.70	
v/c Ratio	2.49	0.40			2.59	0.64		0.72	1.18	0.14	1.00	0.81	
Control Delay	774.2	22.9			768.7	70.5		115.2	116.8	3.4	142.6	25.5	
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	774.2	22.9			768.7	70.5		115.2	116.8	3.4	142.6	25.5	
LOS	F	C			F	E		F	F	A	F	C	
Approach Delay		358.1			430.0				110.6			38.2	
Approach LOS		F			F				F			D	
Queue Length 50th (ft)	~190	19			~610	304		127	~2126	14	300	837	
Queue Length 95th (ft)	#326	88			#820	419		194	#2214	43	#497	1053	
Internal Link Dist (ft)		457			1275				653			845	
Turn Bay Length (ft)	130					250		400		500	380		
Base Capacity (vph)	35	271			107	411		187	2192	1052	224	2273	
Starvation Cap Reductn	0	0			0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0			0	0		0	0	0	0	0	
Storage Cap Reductn	0	0			0	0		0	0	0	0	0	
Reduced v/c Ratio	2.49	0.40			2.59	0.64		0.52	1.18	0.14	1.00	0.81	

#### Intersection Summary

Area Type: Other

Cycle Length: 200.5

Actuated Cycle Length: 200.5

Natural Cycle: 150

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 2.59

Intersection Signal Delay: 123.3

Intersection LOS: F

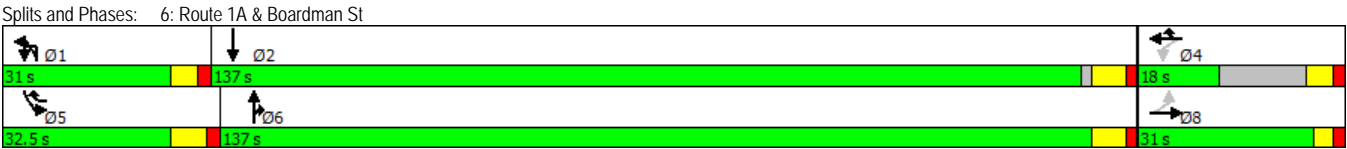
Intersection Capacity Utilization 113.0%























ICU Level of Service H
















Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.



													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	80	15	85	230	25	240	40	50	2370	140	205	1665	20
Future Volume (vph)	80	15	85	230	25	240	40	50	2370	140	205	1665	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	12	12	10	10	12	11	11	11	11	11	12
Total Lost time (s)	5.0	5.0			6.0	6.0		5.0	6.0	6.0	6.5	6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.87			1.00	0.85		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00			0.96	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1668	1476			1624	1436		1447	3355	1546	1728	3261	
Flt Permitted	0.15	1.00			0.51	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	270	1476			859	1436		1447	3355	1546	1728	3261	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	16	92	250	27	261	43	54	2576	152	223	1810	22
RTOR Reduction (vph)	0	80	0	0	0	0	0	0	0	42	0	0	0
Lane Group Flow (vph)	87	28	0	0	277	261	0	97	2576	110	223	1832	0
Confl. Peds. (#/hr)	7					7		1					1
Confl. Bikes (#/hr)													1
Heavy Vehicles (%)	1%	6%	9%	5%	0%	5%	0%	37%	4%	1%	1%	5%	11%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	8	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases		8			4	4 5	1	1	6	6	5	2	
Permitted Phases	8			4									
Actuated Green, G (s)	26.0	26.0			25.0	56.0		17.8	130.0	130.0	25.0	138.7	
Effective Green, g (s)	26.0	26.0			25.0	56.0		18.8	131.0	131.0	26.0	139.7	
Actuated g/C Ratio	0.13	0.13			0.12	0.28		0.09	0.65	0.65	0.13	0.70	
Clearance Time (s)	5.0	5.0			6.0			6.0	7.0	7.0	7.5	7.0	
Vehicle Extension (s)	2.0	2.0			2.0			2.0	4.0	4.0	2.0	4.0	
Lane Grp Cap (vph)	35	191			107	401		135	2192	1010	224	2272	
v/s Ratio Prot		0.02				0.18		0.07	c0.77	0.07	c0.13	c0.56	
v/s Ratio Perm	0.32				c0.32								
v/c Ratio	2.49	0.15			2.59	0.65		0.72	1.18	0.11	1.00	0.81	
Uniform Delay, d1	87.2	77.4			87.8	63.6		88.3	34.8	13.0	87.2	21.0	
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	745.7	0.1			741.4	2.9		14.1	84.0	0.1	58.5	2.3	
Delay (s)	833.0	77.5			829.1	66.5		102.4	118.8	13.0	145.7	23.3	
Level of Service	F	E			F	E		F	F	B	F	C	
Approach Delay (s)		414.6			459.2			112.5				36.6	
Approach LOS		F			F			F				D	
Intersection Summary													
HCM 2000 Control Delay			128.4							F			
HCM 2000 Volume to Capacity ratio			1.35										
Actuated Cycle Length (s)			200.5						19.5				
Intersection Capacity Utilization			113.0%						H				
Analysis Period (min)			15										
c Critical Lane Group													

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	10	5	0	0	0	0	2440	0	0	1900	0
Future Volume (vph)	130	10	5	0	0	0	0	2440	0	0	1900	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	12	12	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1855	0	0	0	0	0	3355	0	0	3355	0
Flt Permitted		0.957										
Satd. Flow (perm)	0	1855	0	0	0	0	0	3355	0	0	3355	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		122			363			405			225	
Travel Time (s)		2.8			8.3			9.2			5.1	
Confl. Peds. (#/hr)									1			
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	88%	0%	2%	2%	2%	0%	4%	0%	0%	4%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	157	0	0	0	0	0	2652	0	0	2065	0
Turn Type	Perm	NA						NA			NA	
Protected Phases		2						1			1	
Permitted Phases		2										
Detector Phase		2						1			1	
Switch Phase												
Minimum Initial (s)	10.0	10.0						20.0			20.0	
Minimum Split (s)	16.0	16.0						27.0			27.0	
Total Split (s)	36.0	36.0						55.0			55.0	
Total Split (%)	39.6%	39.6%						60.4%			60.4%	
Yellow Time (s)	4.0	4.0						5.0			5.0	
All-Red Time (s)	2.0	2.0						2.0			2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.0						7.0			7.0	
Lead/Lag	Lag	Lag						Lead			Lead	
Lead-Lag Optimize?												
Recall Mode	None	None						Max			Max	
Act Effect Green (s)		12.6						48.1			48.1	
Actuated g/C Ratio		0.17						0.65			0.65	
v/c Ratio		0.49						1.21			0.94	
Control Delay		32.8						117.4			23.5	
Queue Delay		0.0						0.0			0.0	
Total Delay		32.8						117.4			23.5	
LOS		C						F			C	
Approach Delay		32.8						117.4			23.5	
Approach LOS		C						F			C	
Queue Length 50th (ft)		65						~785			377	
Queue Length 95th (ft)		118						#1005			#688	
Internal Link Dist (ft)		42			283			325			145	
Turn Bay Length (ft)												
Base Capacity (vph)		757						2188			2188	
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.21						1.21			0.94	
<b>Intersection Summary</b>												
Area Type:	Other											
Cycle Length: 91												
Actuated Cycle Length: 73.7												
Natural Cycle: 100												
Control Type: Semi Act-Uncoord												
Maximum v/c Ratio: 1.21												
Intersection Signal Delay: 74.9	Intersection LOS: E											
Intersection Capacity Utilization 86.6%	ICU Level of Service E											

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.
















Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 9: Route 1A & Jughandle



												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	10	5	0	0	0	0	2440	0	0	1900	0
Future Volume (vph)	130	10	5	0	0	0	0	2440	0	0	1900	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	16	16	16	12	12	12	11	11	11	11	11	11
Total Lost time (s)		6.0						7.0			7.0	
Lane Util. Factor		1.00						0.95			0.95	
Frbp, ped/bikes		1.00						1.00			1.00	
Flpb, ped/bikes		1.00						1.00			1.00	
Frt		1.00						1.00			1.00	
Flt Protected		0.96						1.00			1.00	
Satd. Flow (prot)		1854						3355			3355	
Flt Permitted		0.96						1.00			1.00	
Satd. Flow (perm)		1854						3355			3355	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	11	5	0	0	0	0	2652	0	0	2065	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	155	0	0	0	0	0	2652	0	0	2065	0
Confl. Peds. (#/hr)									1			
Heavy Vehicles (%)	5%	88%	0%	2%	2%	2%	0%	4%	0%	0%	4%	0%
Turn Type	Perm	NA						NA			NA	
Protected Phases		2						1			1	
Permitted Phases	2											
Actuated Green, G (s)		12.6						48.1			48.1	
Effective Green, g (s)		12.6						48.1			48.1	
Actuated g/C Ratio		0.17						0.65			0.65	
Clearance Time (s)		6.0						7.0			7.0	
Vehicle Extension (s)		4.0						4.0			4.0	
Lane Grp Cap (vph)		316						2189			2189	
v/s Ratio Prot								c0.79			0.62	
v/s Ratio Perm		0.08										
v/c Ratio		0.49						1.21			0.94	
Uniform Delay, d1		27.7						12.8			11.6	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		1.6						99.7			9.9	
Delay (s)		29.3						112.5			21.4	
Level of Service		C						F			C	
Approach Delay (s)		29.3			0.0			112.5			21.4	
Approach LOS		C			A			F			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			71.2									E
HCM 2000 Volume to Capacity ratio			1.06									
Actuated Cycle Length (s)			73.7								13.0	
Intersection Capacity Utilization			86.6%									E
Analysis Period (min)			15									
c Critical Lane Group												

	→	↘	↙	↗	←	↖	↗
Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↘	↑↑↑		
Traffic Volume (vph)	1420	195	30	310	1485	0	0
Future Volume (vph)	1420	195	30	310	1485	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	9	11	12	12
Grade (%)	0%				0%	0%	
Storage Length (ft)		500		130		0	0
Storage Lanes		0		1		0	0
Taper Length (ft)				25		25	
Satd. Flow (prot)	4841	0	0	1498	4951	0	0
Flt Permitted				0.950			
Satd. Flow (perm)	4841	0	0	1496	4951	0	0
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	80						
Link Speed (mph)	30				30	30	
Link Distance (ft)	572				1857	345	
Travel Time (s)	13.0				42.2	7.8	
Confl. Peds. (#/hr)		8		8			
Confl. Bikes (#/hr)							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	4%	3%	9%	1%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	2	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%				0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1755	0	0	370	1614	0	0
Turn Type	NA		Prot	Prot	NA		
Protected Phases	2		1	1	1 2		
Permitted Phases							
Detector Phase	2		1	1	1 2		
Switch Phase							
Minimum Initial (s)	8.0		8.0	8.0			
Minimum Split (s)	13.0		13.0	13.0			
Total Split (s)	24.0		17.0	17.0			
Total Split (%)	58.5%		41.5%	41.5%			
Yellow Time (s)	3.5		3.5	3.5			
All-Red Time (s)	1.5		1.5	1.5			
Lost Time Adjust (s)	0.0			0.0			
Total Lost Time (s)	5.0			5.0			
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?							
Recall Mode	Min		None	None			
Act Effect Green (s)	19.0			12.0	41.0		
Actuated g/C Ratio	0.46			0.29	1.00		
v/c Ratio	0.77			0.84	0.33		
Control Delay	11.5			36.3	0.2		
Queue Delay	0.0			0.0	0.0		
Total Delay	11.5			36.3	0.2		
LOS	B			D	A		
Approach Delay	11.5				6.9		
Approach LOS	B				A		
Queue Length 50th (ft)	105			79	0		
Queue Length 95th (ft)	150			#196	0		
Internal Link Dist (ft)	492				1777	265	
Turn Bay Length (ft)				130			
Base Capacity (vph)	2286			438	4951		
Starvation Cap Reductn	0			0	0		
Spillback Cap Reductn	0			0	0		
Storage Cap Reductn	0			0	0		
Reduced v/c Ratio	0.77			0.84	0.33		
<b>Intersection Summary</b>							
Area Type:	Other						
Cycle Length: 41							
Actuated Cycle Length: 41							
Natural Cycle: 45							
Control Type: Actuated-Uncoordinated							
Maximum v/c Ratio: 0.84							
Intersection Signal Delay: 9.1	Intersection LOS: A						
Intersection Capacity Utilization 59.1%	ICU Level of Service B						

























Analysis Period (min) 15  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 11: Route 1A on-ramp & Route 145



	→	↘	↶	↙	←	↖	↗
Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↘	↑↑↑		
Traffic Volume (vph)	1420	195	30	310	1485	0	0
Future Volume (vph)	1420	195	30	310	1485	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	9	11	12	12
Total Lost time (s)	5.0			5.0	5.0		
Lane Util. Factor	0.91			1.00	0.91		
Frpb, ped/bikes	1.00			1.00	1.00		
Flpb, ped/bikes	1.00			1.00	1.00		
Frt	0.98			1.00	1.00		
Flt Protected	1.00			0.95	1.00		
Satd. Flow (prot)	4840			1498	4951		
Flt Permitted	1.00			0.95	1.00		
Satd. Flow (perm)	4840			1498	4951		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1543	212	33	337	1614	0	0
RTOR Reduction (vph)	43	0	0	0	0	0	0
Lane Group Flow (vph)	1712	0	0	370	1614	0	0
Confl. Peds. (#/hr)		8		8			
Heavy Vehicles (%)	1%	4%	3%	9%	1%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	2	0	0
Turn Type	NA		Prot	Prot	NA		
Protected Phases	2		1	1	1 2		
Permitted Phases							
Actuated Green, G (s)	19.0			12.0	41.0		
Effective Green, g (s)	19.0			12.0	41.0		
Actuated g/C Ratio	0.46			0.29	1.00		
Clearance Time (s)	5.0			5.0			
Vehicle Extension (s)	2.0			2.0			
Lane Grp Cap (vph)	2242			438	4951		
v/s Ratio Prot	c0.35			c0.25	0.33		
v/s Ratio Perm							
v/c Ratio	0.76			0.84	0.33		
Uniform Delay, d1	9.1			13.6	0.0		
Progression Factor	1.00			1.00	1.00		
Incremental Delay, d2	1.4			13.4	0.0		
Delay (s)	10.6			27.0	0.0		
Level of Service	B			C	A		
Approach Delay (s)	10.6				5.0	0.0	
Approach LOS	B				A	A	
<b>Intersection Summary</b>							
HCM 2000 Control Delay			7.6		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.79				
Actuated Cycle Length (s)			41.0		Sum of lost time (s)		10.0
Intersection Capacity Utilization			59.1%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							

														
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SBR2	SEL	SER
Lane Configurations														
Traffic Volume (vph)	15	245	10	835	460	110	80	1055	1235	445	10	5	135	20
Future Volume (vph)	15	245	10	835	460	110	80	1055	1235	445	10	5	135	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	16	12	12	12	12	12	14	16	12	12	12	12
Grade (%)		0%			0%			0%		0%			0%	
Storage Length (ft)	50		0	0		0			0		0		0	0
Storage Lanes	1		1	2		0			1		0		1	0
Taper Length (ft)	25			25									25	
Satd. Flow (prot)	0	3328	1816	3502	1775	0	0	3574	1706	3951	0	0	1754	0
Flt Permitted		0.997		0.950									0.958	
Satd. Flow (perm)	0	3327	1816	3447	1775	0	0	3574	1706	3951	0	0	1754	0
Right Turn on Red			Yes				No		Yes			Yes		
Satd. Flow (RTOR)			126						100					
Link Speed (mph)		30			30			30		30			30	
Link Distance (ft)		485			572			480		673			302	
Travel Time (s)		11.0			13.0			10.9		15.3			6.9	
Confl. Peds. (#/hr)	4		7	7		2	4				1	2		7
Confl. Bikes (#/hr)							1							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	0%	0%	2%	1%	0%	1%	1%	3%	0%	0%	0%	11%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														1
Mid-Block Traffic (%)		0%			0%			0%		0%			0%	
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	282	11	908	707	0	0	1147	1342	500	0	0	169	0
Turn Type	Split	NA	Prot	Split	NA			NA	custom	NA			Prot	
Protected Phases	4	4	4	3	3			6	2 3	2			7	
Permitted Phases														
Detector Phase	4	4	4	3	3			6	2 3	2			7	
Switch Phase														
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0			8.0		8.0			8.0	
Minimum Split (s)	20.0	20.0	20.0	28.0	28.0			15.0		20.0			20.0	
Total Split (s)	22.0	22.0	22.0	42.0	42.0			57.0		57.0			21.5	
Total Split (%)	15.4%	15.4%	15.4%	29.5%	29.5%			40.0%		40.0%			15.1%	
Yellow Time (s)	4.0	4.0	4.0	3.0	3.0			4.0		4.0			3.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0			3.0		3.0			3.0	
Lost Time Adjust (s)		-1.0	-1.0	-1.0	-1.0			-1.0		-1.0			-1.0	
Total Lost Time (s)		6.0	6.0	5.0	5.0			6.0		6.0			5.5	
Lead/Lag	Lag	Lag	Lag	Lead	Lead									
Lead-Lag Optimize?														
Recall Mode	None	None	None	None	None			Min		Min			None	
Act Effect Green (s)		15.6	15.6	37.0	37.0			51.0	93.0	51.0			15.8	
Actuated g/C Ratio		0.11	0.11	0.26	0.26			0.36	0.66	0.36			0.11	
v/c Ratio		0.77	0.04	0.99	1.53			0.89	1.16	0.35			0.87	
Control Delay		76.4	0.2	80.4	284.8			52.9	107.2	34.2			99.8	
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0	0.0			0.0	
Total Delay		76.4	0.2	80.4	284.8			52.9	107.2	34.2			99.8	
LOS		E	A	F	F			D	F	C			F	
Approach Delay		73.6			169.8			82.2		34.2			99.8	
Approach LOS		E			F			F		C			F	
Queue Length 50th (ft)		135	0	436	-917			527	-1449	178			157	
Queue Length 95th (ft)		#191	0	#581	#1161			#630	#1720	228			#288	
Internal Link Dist (ft)		405			492			400		593			222	
Turn Bay Length (ft)														
Base Capacity (vph)		375	316	913	462			1285	1153	1421			197	
Starvation Cap Reductn		0	0	0	0			0	0	0			0	
Spillback Cap Reductn		0	0	0	0			0	0	0			0	
Storage Cap Reductn		0	0	0	0			0	0	0			0	
Reduced v/c Ratio		0.75	0.03	0.99	1.53			0.89	1.16	0.35			0.86	
Intersection Summary														
Area Type:	Other													
Cycle Length:	142.5													
Actuated Cycle Length:	141.8													
Natural Cycle:	150													
Control Type:	Actuated-Uncoordinated													
Maximum v/c Ratio:	1.53													
Intersection Signal Delay:	105.5							Intersection LOS: F						
Intersection Capacity Utilization	101.0%							ICU Level of Service G						
























Analysis Period (min) 15

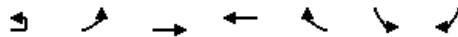
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 31: Route 16 & Winthrop Avenue/Route 145 & Harris Street

 Ø2	 Ø3	 Ø4	 Ø7
57 s	42 s	22 s	21.5 s
 Ø6			
57 s			

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBT	NBR	SBT	SBR	SBR2	SEL	SER	
Lane Configurations															
Traffic Volume (vph)	15	245	10	835	460	110	80	1055	1235	445	10	5	135	20	
Future Volume (vph)	15	245	10	835	460	110	80	1055	1235	445	10	5	135	20	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	12	10	16	12	12	12	12	12	14	16	12	12	12	12	
Total Lost time (s)		6.0	6.0	5.0	5.0			6.0	6.0	6.0			5.5		
Lane Util. Factor		0.95	1.00	0.97	1.00			0.95	1.00	0.95			1.00		
Frpb, ped/bikes		1.00	1.00	1.00	0.99			1.00	1.00	1.00			1.00		
Flpb, ped/bikes		1.00	1.00	1.00	1.00			1.00	1.00	1.00			1.00		
Frt		1.00	0.85	1.00	0.96			1.00	0.85	1.00			0.98		
Flt Protected		1.00	1.00	0.95	1.00			1.00	1.00	1.00			0.96		
Satd. Flow (prot)		3328	1816	3502	1776			3574	1706	3952			1756		
Flt Permitted		1.00	1.00	0.95	1.00			1.00	1.00	1.00			0.96		
Satd. Flow (perm)		3328	1816	3502	1776			3574	1706	3952			1756		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	16	266	11	908	500	120	87	1147	1342	484	11	5	147	22	
RTOR Reduction (vph)	0	0	10	0	0	0	0	0	34	1	0	0	0	0	
Lane Group Flow (vph)	0	282	1	908	707	0	0	1147	1308	499	0	0	169	0	
Confl. Peds. (#/hr)	4		7	7		2	4				1	2		7	
Confl. Bikes (#/hr)							1								
Heavy Vehicles (%)	0%	1%	0%	0%	2%	1%	0%	1%	1%	3%	0%	0%	0%	11%	
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)														1	
Turn Type	Split	NA	Prot	Split	NA			NA	custom	NA			Prot		
Protected Phases	4	4	4	3	3			6	2 3	2			7		
Permitted Phases															
Actuated Green, G (s)		14.6	14.6	36.0	36.0			50.0	93.0	50.0			14.8		
Effective Green, g (s)		15.6	15.6	37.0	37.0			51.0	94.0	51.0			15.8		
Actuated g/C Ratio		0.11	0.11	0.26	0.26			0.36	0.66	0.36			0.11		
Clearance Time (s)		7.0	7.0	6.0	6.0			7.0		7.0			6.5		
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0		3.0			3.0		
Lane Grp Cap (vph)		365	199	913	463			1284	1130	1420			195		
v/s Ratio Prot		c0.08	0.00	0.26	c0.40			0.32	c0.77	0.13			c0.10		
v/s Ratio Perm															
v/c Ratio		0.77	0.01	0.99	1.53			0.89	1.16	0.35			0.87		
Uniform Delay, d1		61.4	56.2	52.3	52.5			42.9	24.0	33.3			62.0		
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00	1.00			1.00		
Incremental Delay, d2		9.8	0.0	28.3	247.9			8.3	81.2	0.2			30.8		
Delay (s)		71.2	56.3	80.6	300.4			51.1	105.2	33.5			92.8		
Level of Service		E	E	F	F			D	F	C			F		
Approach Delay (s)		70.6			176.8			80.3		33.5			92.8		
Approach LOS		E			F			F		C			F		
Intersection Summary															
HCM 2000 Control Delay			106.3		HCM 2000 Level of Service					F					
HCM 2000 Volume to Capacity ratio			1.22												
Actuated Cycle Length (s)			141.9		Sum of lost time (s)					22.5					
Intersection Capacity Utilization			101.0%		ICU Level of Service					G					
Analysis Period (min)			15												



Lane Group	EBU	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø3	Ø9
Lane Configurations		↔	↔↔↔	↔↔↔		↔	↔			
Traffic Volume (vph)	5	275	1375	1095	215	105	245			
Future Volume (vph)	5	275	1375	1095	215	105	245			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900			
Lane Width (ft)	12	11	11	11	12	15	12			
Grade (%)			0%	0%		0%				
Storage Length (ft)		120			0	0	150			
Storage Lanes		1			0	1	1			
Taper Length (ft)		25				25				
Satd. Flow (prot)	0	1728	4951	4848	0	1947	1509			
Flt Permitted		0.950				0.950				
Satd. Flow (perm)	0	1728	4951	4848	0	1947	1509			
Right Turn on Red					Yes		Yes			
Satd. Flow (RTOR)				40			266			
Link Speed (mph)			30	30		30				
Link Distance (ft)			1857	236		865				
Travel Time (s)			42.2	5.4		19.7				
Confl. Peds. (#/hr)										
Confl. Bikes (#/hr)										
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	100%	100%	100%	100%	100%	100%	100%			
Heavy Vehicles (%)	0%	1%	1%	1%	0%	2%	7%			
Bus Blockages (#/hr)	0	0	2	0	0	0	0			
Parking (#/hr)										
Mid-Block Traffic (%)			0%	0%		0%				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	304	1495	1424	0	114	266			
Turn Type	Prot	Prot	NA	NA		Prot	Prot			
Protected Phases	5	5	2 3 5	2 3		7	7	2	3	9
Permitted Phases										
Detector Phase	5	5	2 3 5	2 3		7	7			
Switch Phase										
Minimum Initial (s)	1.0	1.0				20.0	20.0	20.0	8.0	4.0
Minimum Split (s)	20.0	20.0				26.0	26.0	26.0	13.0	22.0
Total Split (s)	21.0	21.0				26.0	26.0	27.0	24.0	22.0
Total Split (%)	17.5%	17.5%				21.7%	21.7%	23%	20%	18%
Yellow Time (s)	3.0	3.0				4.0	4.0	4.0	4.0	3.5
All-Red Time (s)	1.0	1.0				2.0	2.0	2.0	1.0	0.5
Lost Time Adjust (s)		-1.0				-1.0	-1.0			
Total Lost Time (s)		3.0				5.0	5.0			
Lead/Lag	Lag	Lag				Lead	Lead	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes								
Recall Mode	None	None				Min	Min	Min	None	None
Act Effect Green (s)		18.2	68.7	47.5		21.2	21.2			
Actuated g/C Ratio		0.17	0.64	0.44		0.20	0.20			
v/c Ratio		1.03	0.47	0.65		0.30	0.52			
Control Delay		106.7	11.7	26.2		41.4	9.2			
Queue Delay		0.0	0.2	5.2		0.5	0.0			
Total Delay		106.7	11.9	31.4		42.0	9.2			
LOS		F	B	C		D	A			
Approach Delay			27.9	31.4		19.0				
Approach LOS			C	C		B				
Queue Length 50th (ft)		190	131	212		60	0			
Queue Length 95th (ft)		#460	292	363		135	76			
Internal Link Dist (ft)			1777	156		785				
Turn Bay Length (ft)		120					150			
Base Capacity (vph)		294	3183	2176		386	512			
Starvation Cap Reductn		0	0	680		0	0			
Spillback Cap Reductn		0	731	0		88	0			
Storage Cap Reductn		0	0	0		0	0			
Reduced v/c Ratio		1.03	0.61	0.95		0.38	0.52			

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 106.8

Natural Cycle: 150

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.75

Intersection Signal Delay: 28.4

Intersection Capacity Utilization 69.0%

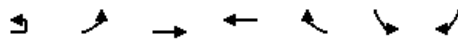
Intersection LOS: C

ICU Level of Service C

Analysis Period (min) 15  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.


Splits and Phases: 38: Route 145/Winthrop Ave & N Shore Rd

#38 #39 Ø7	#38 #39 Ø2	#38 #39 Ø3	#38 #39 Ø5	#38 #39 Ø9
26 s	27 s	24 s	21 s	22 s

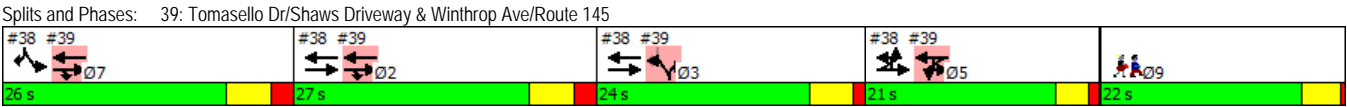






















Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↩	↩↩↩	↩↩↩		↩	↩
Traffic Volume (vph)	5	275	1375	1095	215	105	245
Future Volume (vph)	5	275	1375	1095	215	105	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	11	12	15	12
Total Lost time (s)		3.0	4.0	4.0		5.0	5.0
Lane Util. Factor		1.00	0.91	0.91		1.00	1.00
Frt		1.00	1.00	0.98		1.00	0.85
Flt Protected		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)		1728	4951	4850		1947	1509
Flt Permitted		0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)		1728	4951	4850		1947	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	299	1495	1190	234	114	266
RTOR Reduction (vph)	0	0	0	22	0	0	214
Lane Group Flow (vph)	0	304	1495	1402	0	114	52
Heavy Vehicles (%)	0%	1%	1%	1%	0%	2%	7%
Bus Blockages (#/hr)	0	0	2	0	0	0	0
Turn Type	Prot	Prot	NA	NA		Prot	Prot
Protected Phases	5	5	2 3 5	2 3		7	7
Permitted Phases							
Actuated Green, G (s)		17.2	68.6	46.4		20.2	20.2
Effective Green, g (s)		18.2	67.6	48.4		21.2	21.2
Actuated g/C Ratio		0.17	0.62	0.44		0.19	0.19
Clearance Time (s)		4.0				6.0	6.0
Vehicle Extension (s)		3.0				4.0	4.0
Lane Grp Cap (vph)		288	3064	2149		377	292
v/s Ratio Prot		c0.18	0.30	c0.29		c0.06	0.03
v/s Ratio Perm							
v/c Ratio		1.06	0.49	0.65		0.30	0.18
Uniform Delay, d1		45.5	11.4	23.8		37.7	36.7
Progression Factor		1.00	1.00	1.03		1.00	1.00
Incremental Delay, d2		68.4	0.2	0.7		0.6	0.4
Delay (s)		113.9	11.5	25.2		38.3	37.1
Level of Service		F	B	C		D	D
Approach Delay (s)			28.8	25.2		37.5	
Approach LOS			C	C		D	
<b>Intersection Summary</b>							
HCM 2000 Control Delay			28.3		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio			0.64				
Actuated Cycle Length (s)			109.2		Sum of lost time (s)		20.0
Intersection Capacity Utilization			69.0%		ICU Level of Service		C
Analysis Period (min)			15				
c Critical Lane Group							














													Ø2	Ø7	Ø9
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations		↔↔	↗		↖	↔↔↔		↖↖		↗			↗		
Traffic Volume (vph)	0	1250	230	5	155	945	5	360	0	485	0	0	5		
Future Volume (vph)	0	1250	230	5	155	945	5	360	0	485	0	0	5		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	11	11	12	9	11	12	10	12	12	12	12	16		
Grade (%)		0%				0%			0%			0%			
Storage Length (ft)	0		0		100		0	0		100	0		0		
Storage Lanes	0		1		1		0	1		1	0		1		
Taper Length (ft)	25				25			25			25				
Satd. Flow (prot)	0	3455	1546	0	1624	4947	0	3236	0	1599	0	0	1826		
Flt Permitted					0.950			0.950							
Satd. Flow (perm)	0	3455	1546	0	1624	4947	0	3236	0	1599	0	0	1826		
Right Turn on Red			No				Yes			No			No		
Satd. Flow (RTOR)						1									
Link Speed (mph)		30				30			30			30			
Link Distance (ft)		236				635			1415			589			
Travel Time (s)		5.4				14.4			32.2			13.4			
Confl. Peds. (#/hr)	3														
Confl. Bikes (#/hr)															
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	0%	1%	1%	0%	0%	1%	0%	1%	0%	1%	2%	2%	2%		
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0	0		
Parking (#/hr)															
Mid-Block Traffic (%)		0%				0%			0%			0%			
Shared Lane Traffic (%)															
Lane Group Flow (vph)	0	1359	250	0	173	1032	0	391	0	527	0	0	5		
Turn Type		NA	Prot	Prot	Prot	NA		Prot		Prot			Perm		
Protected Phases		2 7	2 7	5	5	2 5 7		3		3				2	7
Permitted Phases													3		
Detector Phase		2 7	2 7	5	5	2 5 7		3		3			3		
Switch Phase															
Minimum Initial (s)				1.0	1.0			8.0		8.0			8.0	20.0	20.0
Minimum Split (s)				20.0	20.0			13.0		13.0			13.0	26.0	26.0
Total Split (s)				21.0	21.0			24.0		24.0			24.0	27.0	26.0
Total Split (%)				17.5%	17.5%			20.0%		20.0%			20.0%	23%	22%
Yellow Time (s)				3.0	3.0			4.0		4.0			4.0	4.0	3.5
All-Red Time (s)				1.0	1.0			1.0		1.0			1.0	2.0	0.5
Lost Time Adjust (s)					-1.0			-1.0		-1.0			-1.0		
Total Lost Time (s)					3.0			4.0		4.0			4.0		
Lead/Lag				Lag	Lag			Lead		Lead			Lead	Lag	Lead
Lead-Lag Optimize?				Yes	Yes										
Recall Mode				None	None			None		None			None	Min	Min
Act Effect Green (s)		49.5	47.5		18.2	69.3		20.2		20.2			20.2		
Actuated g/C Ratio		0.46	0.44		0.17	0.65		0.19		0.19			0.19		
v/c Ratio		0.85	0.36		0.63	0.32		0.64		1.75			0.01		
Control Delay		33.2	26.5		54.5	6.6		47.0		377.4			40.6		
Queue Delay		48.1	4.4		0.0	0.2		0.0		0.0			0.0		
Total Delay		81.2	31.0		54.5	6.8		47.0		377.4			40.6		
LOS		F	C		D	A		D		F			D		
Approach Delay		73.4				13.6			236.7			40.6			
Approach LOS		E				B			F			D			
Queue Length 50th (ft)		263	85		100	72		114		-475			3		
Queue Length 95th (ft)		#659	184		#228	87		204		#851			15		
Internal Link Dist (ft)		156				555			1335			509			
Turn Bay Length (ft)					100					100					
Base Capacity (vph)		1600	687		276	3208		612		302			345		
Starvation Cap Reductn		509	357		0	0		0		0			0		
Spillback Cap Reductn		0	0		0	1104		0		0			0		
Storage Cap Reductn		0	0		0	0		0		0			0		
Reduced v/c Ratio		1.25	0.76		0.63	0.49		0.64		1.75			0.01		
Intersection Summary															
Area Type:	Other														
Cycle Length:	120														
Actuated Cycle Length:	106.8														
Natural Cycle:	150														
Control Type:	Semi Act-Uncoord														
Maximum v/c Ratio:	1.75														
Intersection Signal Delay:	94.2					Intersection LOS: F									
Intersection Capacity Utilization	83.4%					ICU Level of Service E									

Analysis Period (min) 15  
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.



													
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (vph)	0	1250	230	5	155	945	5	360	0	485	0	0	5
Future Volume (vph)	0	1250	230	5	155	945	5	360	0	485	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	12	9	11	12	10	12	12	12	12	16
Total Lost time (s)		4.0	6.0		3.0	4.0		4.0		4.0			4.0
Lane Util. Factor		0.95	1.00		1.00	0.91		0.97		1.00			1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00			1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00			1.00
Frt		1.00	0.85		1.00	1.00		1.00		0.85			0.86
Flt Protected		1.00	1.00		0.95	1.00		0.95		1.00			1.00
Satd. Flow (prot)		3455	1546		1624	4948		3236		1599			1826
Flt Permitted		1.00	1.00		0.95	1.00		0.95		1.00			1.00
Satd. Flow (perm)		3455	1546		1624	4948		3236		1599			1826
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1359	250	5	168	1027	5	391	0	527	0	0	5
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1359	250	0	173	1032	0	391	0	527	0	0	5
Confl. Peds. (#/hr)	3												
Heavy Vehicles (%)	0%	1%	1%	0%	0%	1%	0%	1%	0%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0	0
Turn Type		NA	Prot	Prot	Prot	NA		Prot		Prot			Perm
Protected Phases		2 7	2 7	5	5	2 5 7		3		3			
Permitted Phases													3
Actuated Green, G (s)		47.4	47.4		17.2	64.6		19.2		19.2			19.2
Effective Green, g (s)		49.4	47.4		18.2	68.6		20.2		20.2			20.2
Actuated g/C Ratio		0.45	0.43		0.17	0.63		0.18		0.18			0.18
Clearance Time (s)					4.0			5.0		5.0			5.0
Vehicle Extension (s)					3.0			4.0		4.0			4.0
Lane Grp Cap (vph)		1562	671		270	3108		598		295			337
v/s Ratio Prot		c0.39	0.16		c0.11	0.21		0.12		c0.33			
v/s Ratio Perm													0.00
v/c Ratio		0.87	0.37		0.64	0.33		0.65		1.79			0.01
Uniform Delay, d1		27.0	20.9		42.4	9.5		41.3		44.5			36.4
Progression Factor		1.01	1.13		1.00	1.00		1.00		1.00			1.00
Incremental Delay, d2		5.2	0.4		5.1	0.1		2.8		367.3			0.0
Delay (s)		32.6	24.1		47.6	9.6		44.1		411.8			36.4
Level of Service		C	C		D	A		D		F			D
Approach Delay (s)		31.3				15.1			255.2			36.4	
Approach LOS		C				B			F			D	
<b>Intersection Summary</b>													
HCM 2000 Control Delay		81.1				HCM 2000 Level of Service		F					
HCM 2000 Volume to Capacity ratio		1.06											
Actuated Cycle Length (s)		109.2				Sum of lost time (s)		24.0					
Intersection Capacity Utilization		83.4%				ICU Level of Service		E					
Analysis Period (min)		15											

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø2
Lane Configurations													
Traffic Volume (vph)	70	230	15	300	180	210	35	300	605	125	240	80	
Future Volume (vph)	70	230	15	300	180	210	35	300	605	125	240	80	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	10	16	12	10	12	12	10	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		150	250		305	0		0	0		0	
Storage Lanes	0		0	1		0	0		1	1		0	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1437	0	1484	1409	1569	0	1530	1275	1624	1481	0	
Flt Permitted		0.843		0.950	0.987			0.927		0.281			
Satd. Flow (perm)	0	1192	0	1460	1403	1569	0	1413	1275	462	1481	0	
Right Turn on Red			Yes			Yes			No			Yes	
Satd. Flow (RTOR)		2				228					11		
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		1166			677			476			1736		
Travel Time (s)		26.5			15.4			10.8			39.5		
Confl. Peds. (#/hr)	92		18	18		92	69		48	48		69	
Confl. Bikes (#/hr)			1						1				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	7%	4%	1%	4%	7%	5%	2%	4%	2%	0%	0%	0%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)	1	1	1						1			1	
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)				21%									
Lane Group Flow (vph)	0	342	0	258	264	228	0	364	658	136	348	0	
Turn Type	Perm	NA		Split	NA	Prot	Perm	NA	pt+ov	D.P+P	NA		
Protected Phases		5		1	1	1		7	17	6	67		2
Permitted Phases	5						7			7			
Detector Phase	5	5		1	1	1	7	7	17	6	67		
Switch Phase													
Minimum Initial (s)	8.0	8.0		8.0	8.0	8.0	8.0	8.0		4.0			1.0
Minimum Split (s)	37.0	37.0		30.0	30.0	30.0	13.0	13.0		8.0			26.0
Total Split (s)	41.0	41.0		32.0	32.0	32.0	37.0	37.0		10.0			30.0
Total Split (%)	27.3%	27.3%		21.3%	21.3%	21.3%	24.7%	24.7%		6.7%			20%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0			3.0
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	2.0	2.0		1.0			1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		0.0		0.0			
Total Lost Time (s)		6.0		6.0	6.0	6.0		5.0		4.0			
Lead/Lag	Lead	Lead		Lead	Lead	Lead				Lag			Lag
Lead-Lag Optimize?													
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None			None
Act Effect Green (s)		35.0		26.0	26.0	26.0		46.4	77.4	53.4	57.4		
Actuated g/C Ratio		0.23		0.17	0.17	0.17		0.31	0.52	0.36	0.38		
v/c Ratio		1.23		1.00	1.08	0.50		0.83	1.00	0.65	0.61		
Control Delay		175.9		117.7	137.5	10.2		66.6	72.1	54.0	44.6		
Queue Delay		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total Delay		175.9		117.7	137.5	10.2		66.6	72.1	54.0	44.6		
LOS		F		F	F	B		E	E	D	D		
Approach Delay		175.9			92.0			70.2			47.2		
Approach LOS		F			F			E			D		
Queue Length 50th (ft)		-410		-270	-303	0		-394	-757	100	296		
Queue Length 95th (ft)		#616		#468	#498	77		#601	#1003	#192	421		
Internal Link Dist (ft)		1086			597			396			1656		
Turn Bay Length (ft)				250		305							
Base Capacity (vph)		279		257	244	460		437	657	210	573		
Starvation Cap Reductn		0		0	0	0		0	0	0	0		
Spillback Cap Reductn		0		0	0	0		0	0	0	0		
Storage Cap Reductn		0		0	0	0		0	0	0	0		
Reduced v/c Ratio		1.23		1.00	1.08	0.50		0.83	1.00	0.65	0.61		






















#### Intersection Summary




















Area Type: CBD  
Cycle Length: 150  
Actuated Cycle Length: 150  
Offset: 0 (0%), Referenced to phase 7:NBSB, Start of Green  
Natural Cycle: 145  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 1.23  
Intersection Signal Delay: 86.1

Intersection LOS: F

Intersection Capacity Utilization 105.3%                      ICU Level of Service G  
Analysis Period (min) 15  
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.



												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	230	15	300	180	210	35	300	605	125	240	80
Future Volume (vph)	70	230	15	300	180	210	35	300	605	125	240	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	16	12	10	12	12	10	12
Total Lost time (s)		6.0		6.0	6.0	6.0		5.0	6.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00		1.00	1.00	1.00		1.00	1.00	1.00	0.97	
Flpb, ped/bikes		0.97		1.00	1.00	1.00		0.99	1.00	0.99	1.00	
Frt		0.99		1.00	1.00	0.85		1.00	0.85	1.00	0.96	
Flt Protected		0.99		0.95	0.99	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)		1398		1484	1409	1569		1519	1275	1611	1493	
Flt Permitted		0.84		0.95	0.99	1.00		0.93	1.00	0.28	1.00	
Satd. Flow (perm)		1191		1484	1409	1569		1415	1275	477	1493	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	250	16	326	196	228	38	326	658	136	261	87
RTOR Reduction (vph)	0	2	0	0	0	188	0	0	0	0	7	0
Lane Group Flow (vph)	0	340	0	258	264	40	0	364	658	136	341	0
Confl. Peds. (#/hr)	92		18	18		92	69		48	48		69
Confl. Bikes (#/hr)			1						1			
Heavy Vehicles (%)	7%	4%	1%	4%	7%	5%	2%	4%	2%	0%	0%	0%
Parking (#/hr)	1	1	1						1			1
Turn Type	Perm	NA		Split	NA	Prot	Perm	NA	pt+ov	D.P+P	NA	
Protected Phases		5		1	1	1		7	1 7	6	6 7	
Permitted Phases	5						7			7		
Actuated Green, G (s)		35.0		26.0	26.0	26.0		44.8	75.8	50.8	54.8	
Effective Green, g (s)		35.0		26.0	26.0	26.0		44.8	70.8	50.8	54.8	
Actuated g/C Ratio		0.23		0.17	0.17	0.17		0.30	0.47	0.34	0.37	
Clearance Time (s)		6.0		6.0	6.0	6.0		5.0		4.0		
Vehicle Extension (s)		4.0		4.0	4.0	4.0		4.0		2.0		
Lane Grp Cap (vph)		277		257	244	271		422	601	206	545	
v/s Ratio Prot				0.17	0.19	0.03			c0.52	0.03	c0.23	
v/s Ratio Perm		c0.29						0.26		0.20		
v/c Ratio		1.23		1.00	1.08	0.15		0.86	1.09	0.66	0.63	
Uniform Delay, d1		57.5		62.0	62.0	52.6		49.7	39.6	43.8	39.2	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		130.6		57.1	81.1	1.1		20.2	65.3	6.0	1.6	
Delay (s)		188.1		119.1	143.1	53.7		69.9	104.9	49.8	40.8	
Level of Service		F		F	F	D		E	F	D	D	
Approach Delay (s)		188.1			107.7			92.4			43.3	
Approach LOS		F			F			F			D	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			100.3			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.00									
Actuated Cycle Length (s)			150.0			Sum of lost time (s)				25.0		
Intersection Capacity Utilization			105.3%			ICU Level of Service				G		
Analysis Period (min)			15									
c Critical Lane Group												

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø3
Lane Configurations													
Traffic Volume (vph)	75	275	250	0	0	0	355	355	85	35	185	135	
Future Volume (vph)	75	275	250	0	0	0	355	355	85	35	185	135	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	10	12	12	12	10	11	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		50	0		0	0		0	0		0	
Storage Lanes	0		1	0		0	1		0	0		1	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1665	1319	0	0	0	1501	1599	0	0	1668	1253	
Flt Permitted		0.989					0.268				0.868		
Satd. Flow (perm)	0	1665	1319	0	0	0	423	1599	0	0	1460	1236	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			124					12				147	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		988			531			233			338		
Travel Time (s)		22.5			12.1			5.3			7.7		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)									1			1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	0%	2%	2%	2%	2%	2%	1%	0%	0%	0%	2%	3%	
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	2	
Parking (#/hr)									1			1	
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	381	272	0	0	0	386	478	0	0	239	147	
Turn Type	Split	NA	Prot				D,P+P	NA		Perm	NA	Perm	
Protected Phases	4	4	4				2	2 6			6		3
Permitted Phases							6			6		6	
Detector Phase	4	4	4				2	2 6		6	6	6	
Switch Phase													
Minimum Initial (s)	5.0	5.0	5.0				5.0			5.0	5.0	5.0	1.0
Minimum Split (s)	11.0	11.0	11.0				12.0			10.0	10.0	10.0	26.0
Total Split (s)	41.0	41.0	41.0				31.0			25.0	25.0	25.0	26.0
Total Split (%)	33.3%	33.3%	33.3%				25.2%			20.3%	20.3%	20.3%	21%
Yellow Time (s)	4.0	4.0	4.0				5.0			4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0				2.0			1.0	1.0	1.0	1.0
Lost Time Adjust (s)		-2.0	-2.0				-1.0				-2.0	0.0	
Total Lost Time (s)		4.0	4.0				6.0				3.0	5.0	
Lead/Lag							Lead			Lag	Lag	Lag	
Lead-Lag Optimize?													
Recall Mode	None	None	None				Min			Max	Max	Max	None
Act Effect Green (s)		32.4	32.4				44.1	50.1			22.0	20.0	
Actuated g/C Ratio		0.27	0.27				0.37	0.42			0.19	0.17	
v/c Ratio		0.84	0.60				1.00	0.70			0.88	0.45	
Control Delay		57.5	25.6				79.4	35.0			79.9	11.8	
Queue Delay		0.0	0.0				0.0	0.0			0.0	0.0	
Total Delay		57.5	25.6				79.4	35.0			79.9	11.8	
LOS		E	C				E	C			E	B	
Approach Delay		44.2						54.8			53.9		
Approach LOS		D						D			D		
Queue Length 50th (ft)		275	97				-269	303			186	0	
Queue Length 95th (ft)		397	190				#477	444			#345	61	
Internal Link Dist (ft)		908			451			153			258		
Turn Bay Length (ft)			50										
Base Capacity (vph)		520	497				385	682			271	330	
Starvation Cap Reductn		0	0				0	0			0	0	
Spillback Cap Reductn		0	0				0	0			0	0	
Storage Cap Reductn		0	0				0	0			0	0	
Reduced v/c Ratio		0.73	0.55				1.00	0.70			0.88	0.45	

## Intersection Summary

Area Type: CBD

Cycle Length: 123

Actuated Cycle Length: 118.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 51.0

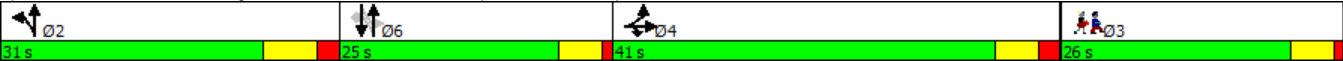
Intersection LOS: D

Intersection Capacity Utilization 71.8%



















ICU Level of Service C


















Analysis Period (min) 15  
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 46: Bennington Street/State Road & Winthrop Avenue /Winthrop Avenue





												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	275	250	0	0	0	355	355	85	35	185	135
Future Volume (vph)	75	275	250	0	0	0	355	355	85	35	185	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	10	12	12	12	10	11	12	12	12	12
Total Lost time (s)		4.0	4.0				6.0	6.0			3.0	5.0
Lane Util. Factor		1.00	1.00				1.00	1.00			1.00	1.00
Frpb, ped/bikes		1.00	1.00				1.00	1.00			1.00	0.99
Flpb, ped/bikes		1.00	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.85				1.00	0.97			1.00	0.85
Flt Protected		0.99	1.00				0.95	1.00			0.99	1.00
Satd. Flow (prot)		1666	1319				1501	1599			1668	1236
Flt Permitted		0.99	1.00				0.27	1.00			0.87	1.00
Satd. Flow (perm)		1666	1319				424	1599			1459	1236
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	82	299	272	0	0	0	386	386	92	38	201	147
RTOR Reduction (vph)	0	0	90	0	0	0	0	7	0	0	0	122
Lane Group Flow (vph)	0	381	182	0	0	0	386	471	0	0	239	25
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	0%	2%	2%	2%	2%	2%	1%	0%	0%	0%	2%	3%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	2
Parking (#/hr)									1			1
Turn Type	Split	NA	Prot				D.P+P	NA		Perm	NA	Perm
Protected Phases	4	4	4				2	2 6			6	
Permitted Phases							6			6		6
Actuated Green, G (s)		30.4	30.4				44.0	51.0			20.0	20.0
Effective Green, g (s)		32.4	32.4				46.0	52.0			22.0	20.0
Actuated g/C Ratio		0.27	0.27				0.39	0.44			0.19	0.17
Clearance Time (s)		6.0	6.0				7.0				5.0	5.0
Vehicle Extension (s)		3.0	3.0				3.0				3.0	3.0
Lane Grp Cap (vph)		455	360				392	702			271	208
v/s Ratio Prot		c0.23	0.14				c0.21	0.29				
v/s Ratio Perm							c0.17				0.16	0.02
v/c Ratio		0.84	0.51				0.98	0.67			0.88	0.12
Uniform Delay, d1		40.5	36.2				30.8	26.4			46.9	41.7
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		12.6	1.1				41.1	2.5			31.2	1.2
Delay (s)		53.2	37.4				71.9	28.9			78.2	42.9
Level of Service		D	D				E	C			E	D
Approach Delay (s)		46.6			0.0			48.1			64.7	
Approach LOS		D			A			D			E	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			51.0				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.73									
Actuated Cycle Length (s)			118.4				Sum of lost time (s)			19.0		
Intersection Capacity Utilization			71.8%				ICU Level of Service			C		
Analysis Period (min)			15									
c Critical Lane Group												

												
Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL2	SBL	SBR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (vph)	35	1020	685	645	10	25	10	10	20	0	445	15
Future Volume (vph)	35	1020	685	645	10	25	10	10	20	0	445	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%	0%				0%		0%		
Storage Length (ft)		0			0			0	0	0	0	
Storage Lanes		2			0			1	0	0	3	
Taper Length (ft)		25						25		25		
Satd. Flow (prot)	0	3433	1863	3506	0	0	0	1694	0	0	3610	0
Flt Permitted		0.933						0.976				
Satd. Flow (perm)	0	3343	1863	3506	0	0	0	1694	0	0	3610	0
Right Turn on Red						Yes			Yes			Yes
Satd. Flow (RTOR)				4				157			143	
Link Speed (mph)			30	30				30		30		
Link Distance (ft)			635	988				300		1471		
Travel Time (s)			14.4	22.5				6.8		33.4		
Confl. Peds. (#/hr)		13				13				1		
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%	0%				0%		0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1147	745	739	0	0	0	44	0	0	500	0
Turn Type	Prot	Split	NA	NA			Prot	Prot			Prot	
Protected Phases	1	6	6	3			4	4			2	
Permitted Phases												
Detector Phase	1	6	6	3			4	4			2	
Switch Phase												
Minimum Initial (s)	10.0	4.0	4.0	10.0			4.0	4.0			10.0	
Minimum Split (s)	15.0	20.0	20.0	22.5			22.0	22.0			15.0	
Total Split (s)	15.0	35.5	35.5	22.5			22.0	22.0			20.5	
Total Split (%)	18.8%	44.4%	44.4%	28.1%			27.5%	27.5%			25.6%	
Yellow Time (s)	4.0	3.5	3.5	3.5			3.5	3.5			4.0	
All-Red Time (s)	1.0	0.5	0.5	1.0			0.5	0.5			1.0	
Lost Time Adjust (s)		0.0	0.0	0.0				0.0			0.0	
Total Lost Time (s)		4.0	4.0	4.5				4.0			5.0	
Lead/Lag	Lag			Lag			Lead	Lead			Lead	
Lead-Lag Optimize?							Yes	Yes				
Recall Mode	Min	None	None	None			None	None			Min	
Act Effect Green (s)		31.7	31.7	17.9				5.5			15.0	
Actuated g/C Ratio		0.50	0.50	0.28				0.09			0.24	
v/c Ratio		1.03	0.80	0.75				0.15			0.52	
Control Delay		57.0	23.4	27.3				1.1			17.6	
Queue Delay		0.0	0.0	0.0				0.0			0.0	
Total Delay		57.0	23.4	27.3				1.1			17.6	
LOS		E	C	C				A			B	
Approach Delay			43.8	27.3				1.1		17.6		
Approach LOS			D	C				A		B		
Queue Length 50th (ft)		-221	258	147				0			55	
Queue Length 95th (ft)		#402	#469	#216				0			92	
Internal Link Dist (ft)			555	908				220		1391		
Turn Bay Length (ft)												
Base Capacity (vph)		1118	930	1002				595			995	
Starvation Cap Reductn		0	0	0				0			0	
Spillback Cap Reductn		0	0	0				0			0	
Storage Cap Reductn		0	0	0				0			0	
Reduced v/c Ratio		1.03	0.80	0.74				0.07			0.50	

## Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 63.5

Natural Cycle: 150

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 35.2

Intersection LOS: D

Intersection Capacity Utilization 71.1%






ICU Level of Service C


















Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 48: Route 145/Winthrop Avenue & Shaw's Site Driveway & Revere Beach Pkwy

 Ø2	 Ø1	 Ø4	 Ø3
20,5 s	15 s	22 s	22,5 s
 Ø6			
35,5 s			

												
Movement	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL2	SBL	SBR	SWL	SWR	SWR2
Lane Configurations												
Traffic Volume (vph)	35	1020	685	645	10	25	10	10	20	0	445	15
Future Volume (vph)	35	1020	685	645	10	25	10	10	20	0	445	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.5				4.0			5.0	
Lane Util. Factor		0.97	1.00	0.95				1.00			0.76	
Frbp, ped/bikes		1.00	1.00	1.00				1.00			1.00	
Flpb, ped/bikes		0.99	1.00	1.00				1.00			1.00	
Frt		1.00	1.00	0.99				0.93			0.85	
Flt Protected		0.95	1.00	1.00				0.98			1.00	
Satd. Flow (prot)		3409	1863	3507				1695			3610	
Flt Permitted		0.93	1.00	1.00				0.98			1.00	
Satd. Flow (perm)		3349	1863	3507				1695			3610	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	1109	745	701	11	27	11	11	22	0	484	16
RTOR Reduction (vph)	0	0	0	3	0	0	0	42	0	0	110	0
Lane Group Flow (vph)	0	1147	745	736	0	0	0	2	0	0	390	0
Confl. Peds. (#/hr)		13				13				1		
Turn Type	Prot	Split	NA	NA			Prot	Prot			Prot	
Protected Phases	1	6	6	3			4	4			2	
Permitted Phases												
Actuated Green, G (s)		31.7	31.7	17.9				3.1			15.0	
Effective Green, g (s)		31.7	31.7	17.9				3.1			15.0	
Actuated g/C Ratio		0.49	0.49	0.27				0.05			0.23	
Clearance Time (s)		4.0	4.0	4.5				4.0			5.0	
Vehicle Extension (s)		3.0	3.0	4.0				3.0			7.0	
Lane Grp Cap (vph)		1638	905	962				80			830	
v/s Ratio Prot		0.11	c0.40	c0.21				c0.00			0.11	
v/s Ratio Perm		0.23										
v/c Ratio		0.70	0.82	0.77				0.03			0.47	
Uniform Delay, d1		14.0	14.3	21.7				29.6			21.7	
Progression Factor		1.00	1.00	1.00				1.00			1.00	
Incremental Delay, d2		1.4	6.1	3.9				0.1			1.5	
Delay (s)		15.4	20.5	25.6				29.7			23.2	
Level of Service		B	C	C				C			C	
Approach Delay (s)			17.4	25.6				29.7		23.2		
Approach LOS			B	C				C		C		
<b>Intersection Summary</b>												
HCM 2000 Control Delay			20.4		HCM 2000 Level of Service						C	
HCM 2000 Volume to Capacity ratio			0.85									
Actuated Cycle Length (s)			65.2		Sum of lost time (s)					18.5		
Intersection Capacity Utilization			71.1%		ICU Level of Service					C		
Analysis Period (min)			15									
c Critical Lane Group												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1	Ø2	Ø3	Ø4
Lane Configurations					↕↕	↗		↕↕			↕↕	↗				
Traffic Volume (vph)	0	0	0	0	1210	355	0	1000	0	0	850	295				
Future Volume (vph)	0	0	0	0	1210	355	0	1000	0	0	850	295				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Satd. Flow (prot)	0	0	0	0	3539	1583	0	3438	0	0	3374	1583				
Flt Permitted																
Satd. Flow (perm)	0	0	0	0	3539	1583	0	3438	0	0	3374	1583				
Right Turn on Red			Yes			Yes			Yes			Yes				
Satd. Flow (RTOR)						105						305				
Link Speed (mph)		30			30			30			30					
Link Distance (ft)		244			245			403			338					
Travel Time (s)		5.5			5.6			9.2			7.7					
Confl. Peds. (#/hr)						21										
Confl. Bikes (#/hr)						1										
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92				
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	7%	2%				
Shared Lane Traffic (%)																
Lane Group Flow (vph)	0	0	0	0	1315	386	0	1087	0	0	924	321				
Turn Type					NA	Prot		NA			NA	Prot				
Protected Phases					4 5 6 8	4 5 6 8		1 2 3			1 2	1 2	1	2	3	4
Permitted Phases																
Minimum Split (s)													10.0	19.0	16.0	16.0
Total Split (s)													35.0	14.0	16.0	16.0
Total Split (%)													31%	12%	14%	14%
Yellow Time (s)													4.0	4.0	3.0	3.0
All-Red Time (s)													1.0	1.0	1.0	1.0
Lost Time Adjust (s)																
Total Lost Time (s)																
Lead/Lag													Lead	Lag		Lead
Lead-Lag Optimize?																
Act Effct Green (s)					45.0	45.0		60.0			44.0	44.0				
Actuated g/C Ratio					0.39	0.39		0.53			0.39	0.39				
v/c Ratio					0.94	0.56		0.60			0.71	0.40				
Control Delay					48.1	24.4		0.8			33.3	4.9				
Queue Delay					46.1	28.3		0.3			0.0	0.0				
Total Delay					94.3	52.7		1.1			33.3	4.9				
LOS					F	D		A			C	A				
Approach Delay					84.8			1.1			26.0					
Approach LOS					F			A			C					
Queue Length 50th (ft)					521	151		0			297	7				
Queue Length 95th (ft)					m#613	m191		0			374	65				
Internal Link Dist (ft)		164			165			323			258					
Turn Bay Length (ft)																
Base Capacity (vph)					1396	688		1809			1302	798				
Starvation Cap Reductn					577	308		205			0	0				
Spillback Cap Reductn					0	0		0			0	0				
Storage Cap Reductn					0	0		0			0	0				
Reduced v/c Ratio					1.61	1.02		0.68			0.71	0.40				

#### Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.27

Intersection Signal Delay: 44.1

Intersection LOS: D

Intersection Capacity Utilization 68.6%

ICU Level of Service C

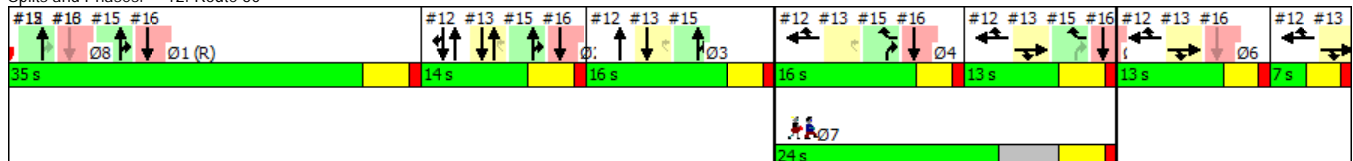
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.













Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: Route 60



Lane Group	Ø5	Ø6	Ø7	Ø8
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Heavy Vehicles (%)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	5	6	7	8
Permitted Phases				
Minimum Split (s)	13.0	13.0	24.0	9.0
Total Split (s)	13.0	13.0	24.0	7.0
Total Split (%)	11%	11%	21%	6%
Yellow Time (s)	4.0	3.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead		Lag
Lead-Lag Optimize?				
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				
Intersection Summary				

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑↑			↑↑	↑
Traffic Volume (vph)	0	0	0	0	1210	355	0	1000	0	0	850	295
Future Volume (vph)	0	0	0	0	1210	355	0	1000	0	0	850	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		5.0			5.0	5.0
Lane Util. Factor					0.95	1.00		0.95			0.95	1.00
Frbp, ped/bikes					1.00	1.00		1.00			1.00	1.00
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					3539	1583		3438			3374	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					3539	1583		3438			3374	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1315	386	0	1087	0	0	924	321
RTOR Reduction (vph)	0	0	0	0	0	68	0	0	0	0	0	187
Lane Group Flow (vph)	0	0	0	0	1315	318	0	1087	0	0	924	134
Confl. Peds. (#/hr)					21							
Confl. Bikes (#/hr)					1							
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	7%	2%
Turn Type					NA	Prot		NA			NA	Prot
Protected Phases					4 5 6 8	4 5 6 8		1 2 3			1 2	1 2
Permitted Phases												
Actuated Green, G (s)					45.0	45.0		61.0			44.0	44.0
Effective Green, g (s)					40.0	40.0		61.0			44.0	44.0
Actuated g/C Ratio					0.35	0.35		0.54			0.39	0.39
Clearance Time (s)												
Lane Grp Cap (vph)					1241	555		1839			1302	610
v/s Ratio Prot					c0.37	0.20		c0.32			c0.27	0.08
v/s Ratio Perm												
v/c Ratio					1.06	0.57		0.59			0.71	0.22
Uniform Delay, d1					37.0	30.1		18.0			29.6	23.5
Progression Factor					1.12	1.14		0.00			1.00	1.00
Incremental Delay, d2					39.2	3.0		0.8			3.3	0.8
Delay (s)					80.8	37.3		0.8			32.9	24.3
Level of Service					F	D		A			C	C
Approach Delay (s)		0.0			70.9			0.8			30.7	
Approach LOS		A			E			A			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			39.6		HCM 2000 Level of Service					D		
HCM 2000 Volume to Capacity ratio			0.99									
Actuated Cycle Length (s)			114.0		Sum of lost time (s)				31.0			
Intersection Capacity Utilization			68.6%		ICU Level of Service				C			
Analysis Period (min)			15									

c Critical Lane Group

	→	↘	↑	↗	↓	↖							
Lane Group	EBT	EBR2	NBT	NBR	SBT	NWR2	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations	↑↑	↗↗	↑↑	↗	↑↑	↗↗							
Traffic Volume (vph)	525	900	1000	480	850	1100							
Future Volume (vph)	525	900	1000	480	850	1100							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900							
Storage Length (ft)				100									
Storage Lanes				1									
Taper Length (ft)													
Satd. Flow (prot)	3471	2787	3438	1568	3406	2814							
Flt Permitted													
Satd. Flow (perm)	3471	2787	3438	1568	3406	2814							
Right Turn on Red		Yes				Yes							
Satd. Flow (RTOR)		518				144							
Link Speed (mph)	30		30		30								
Link Distance (ft)	272		380		403								
Travel Time (s)	6.2		8.6		9.2								
Confl. Peds. (#/hr)		2											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92							
Heavy Vehicles (%)	4%	2%	5%	3%	6%	1%							
Shared Lane Traffic (%)													
Lane Group Flow (vph)	571	978	1087	522	924	1196							
Turn Type	NA	Prot	NA	custom	NA	Perm							
Protected Phases	5 6 8	5 6 8	1 2	1	1 2 3		2	3	4	5	6	7	8
Permitted Phases						2 3 4							
Minimum Split (s)				10.0			19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)				35.0			14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)				30.7%			12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)				4.0			4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)				1.0			1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)				0.0									
Total Lost Time (s)				5.0									
Lead/Lag				Lead			Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?													
Act Effct Green (s)	28.0	28.0	44.0	30.0	60.0	41.0							
Actuated g/C Ratio	0.25	0.25	0.39	0.26	0.53	0.36							
v/c Ratio	0.67	0.91	0.82	1.27	0.52	1.08							
Control Delay	32.3	22.5	37.7	174.4	0.7	84.1							
Queue Delay	10.1	3.1	0.0	0.0	0.2	0.0							
Total Delay	42.3	25.5	37.7	174.4	0.9	84.1							
LOS	D	C	D	F	A	F							
Approach Delay	31.7		82.0		0.9								
Approach LOS	C		F		A								
Queue Length 50th (ft)	143	55	372	~483	0	~519							
Queue Length 95th (ft)	213	#118	461	#693	0	#667							
Internal Link Dist (ft)	192		300		323								
Turn Bay Length (ft)				100									
Base Capacity (vph)	852	1075	1326	412	1792	1104							
Starvation Cap Reductn	251	47	0	0	211	0							
Spillback Cap Reductn	0	0	0	0	0	0							
Storage Cap Reductn	0	0	0	0	0	0							
Reduced v/c Ratio	0.95	0.95	0.82	1.27	0.58	1.08							

#### Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.27

Intersection Signal Delay: 53.5

Intersection LOS: D

Intersection Capacity Utilization Err%

ICU Level of Service H

Analysis Period (min) 15

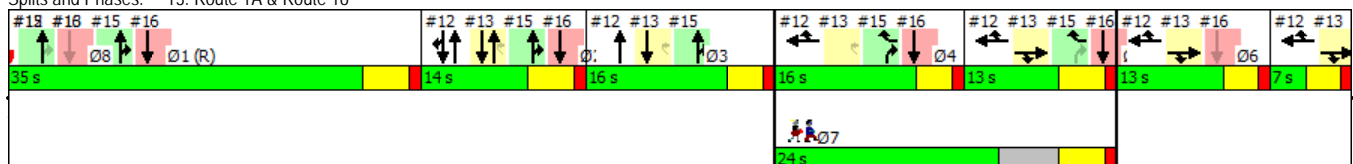
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 13: Route 1A & Route 16





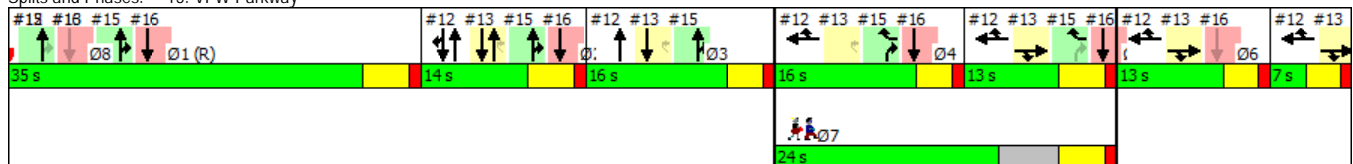
	→	↘	↑	↗	↓	↖
Movement	EBT	EBR2	NBT	NBR	SBT	NWR2
Lane Configurations	↑↑	↗↗	↑↑	↗	↑↑	↗↗
Traffic Volume (vph)	525	900	1000	480	850	1100
Future Volume (vph)	525	900	1000	480	850	1100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.95	0.88	0.95	1.00	0.95	0.88
Frbp, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)	3471	2787	3438	1568	3406	2814
Flt Permitted	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (perm)	3471	2787	3438	1568	3406	2814
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	571	978	1087	522	924	1196
RTOR Reduction (vph)	0	404	0	0	0	96
Lane Group Flow (vph)	571	574	1087	522	924	1100
Confl. Peds. (#/hr)	2					
Heavy Vehicles (%)	4%	2%	5%	3%	6%	1%
Turn Type	NA	Prot	NA	custom	NA	Perm
Protected Phases	5 6 8	5 6 8	1 2	1	1 2 3	
Permitted Phases						2 3 4
Actuated Green, G (s)	29.0	29.0	44.0	30.0	61.0	42.0
Effective Green, g (s)	25.0	25.0	44.0	30.0	61.0	38.0
Actuated g/C Ratio	0.22	0.22	0.39	0.26	0.54	0.33
Clearance Time (s)	5.0					
Lane Grp Cap (vph)	761	611	1326	412	1822	938
v/s Ratio Prot	0.16	c0.21	0.32	c0.33	0.27	
v/s Ratio Perm	c0.39					
v/c Ratio	0.75	0.94	0.82	1.27	0.51	1.17
Uniform Delay, d1	41.6	43.7	31.4	42.0	16.9	38.0
Progression Factor	0.72	0.47	1.00	1.00	0.00	1.00
Incremental Delay, d2	6.4	23.3	5.8	138.2	0.7	89.1
Delay (s)	36.4	43.9	37.2	180.2	0.7	127.1
Level of Service	D	D	D	F	A	F
Approach Delay (s)	41.1		83.6		0.7	
Approach LOS	D		F		A	
Intersection Summary						
HCM 2000 Control Delay			66.5	HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio			1.28			
Actuated Cycle Length (s)			114.0	Sum of lost time (s)		31.0
Intersection Capacity Utilization			Err%	ICU Level of Service		H
Analysis Period (min)			15			
c Critical Lane Group						










Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations		↗↘	↗↘	↗↘										
Traffic Volume (vph)	0	1080	440	1665	0	0								
Future Volume (vph)	0	1080	440	1665	0	0								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Satd. Flow (prot)	0	2787	3539	2787	0	0								
Fit Permitted														
Satd. Flow (perm)	0	2787	3539	2787	0	0								
Right Turn on Red		Yes		Yes										
Satd. Flow (RTOR)		849		1810										
Link Speed (mph)	30		30		30									
Link Distance (ft)	507		317		245									
Travel Time (s)	11.5		7.2		5.6									
Confl. Peds. (#/hr)		11												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	1174	478	1810	0	0								
Turn Type		custom	NA	custom										
Protected Phases		4 5	1 2 3 8	1 2 3 4			1	2	3	4	5	6	7	8
Permitted Phases				5 8										
Minimum Split (s)							10.0	19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)							35.0	14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)							31%	12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)							4.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)														
Total Lost Time (s)														
Lead/Lag							Lead	Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?														
Act Effct Green (s)		25.0	67.0	96.0										
Actuated g/C Ratio		0.22	0.59	0.84										
v/c Ratio		0.92	0.23	0.69										
Control Delay		24.5	13.9	1.0										
Queue Delay		46.4	1.2	3.7										
Total Delay		70.9	15.2	4.8										
LOS		E	B	A										
Approach Delay	70.9		6.9											
Approach LOS	E		A											
Queue Length 50th (ft)		149	100	0										
Queue Length 95th (ft)		#315	m96	m14										
Internal Link Dist (ft)	427		237		165									
Turn Bay Length (ft)														
Base Capacity (vph)		1274	2079	2632										
Starvation Cap Reductn		0	1333	718										
Spillback Cap Reductn		362	958	0										
Storage Cap Reductn		0	0	0										
Reduced v/c Ratio		1.29	0.64	0.95										

#### Intersection Summary

Area Type: Other  
Cycle Length: 114  
Actuated Cycle Length: 114  
Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green  
Natural Cycle: 120  
Control Type: Pretimed  
Maximum v/c Ratio: 1.27  
Intersection Signal Delay: 28.6 Intersection LOS: C  
Intersection Capacity Utilization 62.4% ICU Level of Service B  
Analysis Period (min) 15  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.  
m Volume for 95th percentile queue is metered by upstream signal.

#### Splits and Phases: 15: VFW Parkway



						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	1080	440	1665	0	0
Future Volume (vph)	0	1080	440	1665	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.0	5.0		
Lane Util. Factor		0.88	0.95	0.88		
Flpb, ped/bikes		1.00	1.00	1.00		
Flpb, ped/bikes		1.00	1.00	1.00		
Frt		0.85	1.00	0.85		
Flt Protected		1.00	1.00	1.00		
Satd. Flow (prot)		2787	3539	2787		
Flt Permitted		1.00	1.00	1.00		
Satd. Flow (perm)		2787	3539	2787		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1174	478	1810	0	0
RTOR Reduction (vph)	0	670	0	476	0	0
Lane Group Flow (vph)	0	504	478	1334	0	0
Confl. Peds. (#/hr)		11				
Turn Type		custom	NA	custom		
Protected Phases		4 5	1 2 3 8	1 2 3 4		
Permitted Phases				5 8		
Actuated Green, G (s)		24.0	68.0	88.0		
Effective Green, g (s)		24.0	64.0	84.0		
Actuated g/C Ratio		0.21	0.56	0.74		
Clearance Time (s)						
Lane Grp Cap (vph)		586	1986	2053		
v/s Ratio Prot		c0.18	0.14	c0.42		
v/s Ratio Perm				0.06		
v/c Ratio		0.86	0.24	0.65		
Uniform Delay, d1		43.4	12.7	7.6		
Progression Factor		1.00	1.23	9.81		
Incremental Delay, d2		15.2	0.0	0.1		
Delay (s)		58.5	15.7	74.4		
Level of Service		E	B	E		
Approach Delay (s)	58.5		62.1		0.0	
Approach LOS	E		E		A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		60.9		HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio		0.75				
Actuated Cycle Length (s)		114.0		Sum of lost time (s)	31.0	
Intersection Capacity Utilization		62.4%		ICU Level of Service	B	
Analysis Period (min)		15				

c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Lane Configurations		↗		↑	↖	↖								
Traffic Volume (vph)	0	375	0	0	1050	455								
Future Volume (vph)	0	375	0	0	1050	455								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Satd. Flow (prot)	0	1580	0	0	3539	1583								
Flt Permitted														
Satd. Flow (perm)	0	1547	0	0	3539	1538								
Right Turn on Red		Yes				Yes								
Satd. Flow (RTOR)		297				286								
Link Speed (mph)	30			30	30									
Link Distance (ft)	572			272	244									
Travel Time (s)	13.0			6.2	5.5									
Confl. Peds. (#/hr)		31				17								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	2%	4%	2%	2%	2%	2%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	408	0	0	1141	495								
Turn Type		Free			NA	Free								
Protected Phases				1 2 4 5			1	2	3	4	5	6	7	8
Permitted Phases		Free			6 8	Free								
Minimum Split (s)							10.0	19.0	16.0	16.0	13.0	13.0	24.0	9.0
Total Split (s)							35.0	14.0	16.0	16.0	13.0	13.0	24.0	7.0
Total Split (%)							31%	12%	14%	14%	11%	11%	21%	6%
Yellow Time (s)							4.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)														
Total Lost Time (s)														
Lead/Lag							Lead	Lag		Lead	Lag	Lead		Lag
Lead-Lag Optimize?														
Act Effect Green (s)		114.0			93.0	114.0								
Actuated g/C Ratio		1.00			0.82	1.00								
v/c Ratio		0.26			0.40	0.32								
Control Delay		0.4			0.6	0.3								
Queue Delay		0.0			0.8	0.0								
Total Delay		0.4			1.4	0.3								
LOS		A			A	A								
Approach Delay	0.4				1.1									
Approach LOS	A				A									
Queue Length 50th (ft)		0			12	0								
Queue Length 95th (ft)		0			m11	m0								
Internal Link Dist (ft)	492			192	164									
Turn Bay Length (ft)														
Base Capacity (vph)		1547			2887	1538								
Starvation Cap Reductn		0			1329	0								
Spillback Cap Reductn		25			57	0								
Storage Cap Reductn		0			0	0								
Reduced v/c Ratio		0.27			0.73	0.32								

#### Intersection Summary

Area Type: Other

Cycle Length: 114

Actuated Cycle Length: 114

Offset: 73 (64%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 120

Control Type: Pretimed

Maximum v/c Ratio: 1.27

Intersection Signal Delay: 0.9

Intersection LOS: A

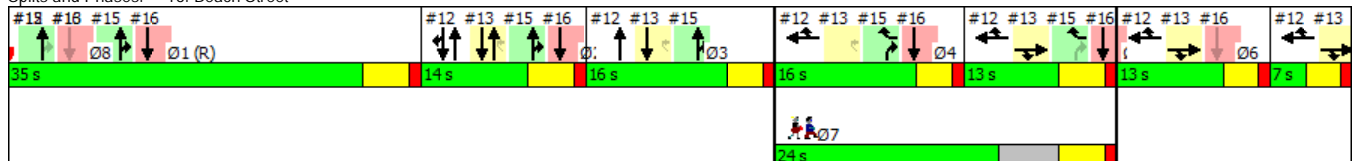
Intersection Capacity Utilization 46.3%











ICU Level of Service A










Analysis Period (min) 15










m Volume for 95th percentile queue is metered by upstream signal.














#### Splits and Phases: 16: Beach Street
















						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					 	
Traffic Volume (vph)	0	375	0	0	1050	455
Future Volume (vph)	0	375	0	0	1050	455
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			5.0	4.0
Lane Util. Factor		1.00			0.95	1.00
Frbp, ped/bikes		0.98			1.00	0.97
Flpb, ped/bikes		1.00			1.00	1.00
Frt		0.86			1.00	0.85
Flt Protected		1.00			1.00	1.00
Satd. Flow (prot)		1547			3539	1538
Flt Permitted		1.00			1.00	1.00
Satd. Flow (perm)		1547			3539	1538
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	408	0	0	1141	495
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	408	0	0	1141	495
Confl. Peds. (#/hr)		31				17
Heavy Vehicles (%)	2%	4%	2%	2%	2%	2%
Turn Type		Free			NA	Free
Protected Phases					1 2 4 5	
Permitted Phases		Free			6 8	Free
Actuated Green, G (s)		114.0			84.0	114.0
Effective Green, g (s)		114.0			76.0	114.0
Actuated g/C Ratio		1.00			0.67	1.00
Clearance Time (s)						
Lane Grp Cap (vph)		1547			2514	1538
v/s Ratio Prot					c0.25	
v/s Ratio Perm		0.26			0.07	c0.32
v/c Ratio		0.26			0.45	0.32
Uniform Delay, d1		0.0			9.1	0.0
Progression Factor		1.00			0.13	1.00
Incremental Delay, d2		0.4			0.3	0.3
Delay (s)		0.4			1.5	0.3
Level of Service		A			A	A
Approach Delay (s)	0.4			0.0	1.1	
Approach LOS	A			A	A	
<b>Intersection Summary</b>						
HCM 2000 Control Delay		1.0			HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio		0.52				
Actuated Cycle Length (s)		114.0			Sum of lost time (s)	31.0
Intersection Capacity Utilization		46.3%			ICU Level of Service	A
Analysis Period (min)		15				
c Critical Lane Group						

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	105	2580	110	0	1910
Future Volume (vph)	0	105	2580	110	0	1910
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1808	3474	0	0	3438
Flt Permitted						
Satd. Flow (perm)	0	1808	3474	0	0	3438
Link Speed (mph)	30		30			30
Link Distance (ft)	1034		925			475
Travel Time (s)	23.5		21.0			10.8
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	3%	10%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	114	2924	0	0	2076
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	88.0%			ICU Level of Service E		
Analysis Period (min)	15					










						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	105	2580	110	0	1910
Future Volume (Veh/h)	0	105	2580	110	0	1910
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	114	2804	120	0	2076
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			925			880
pX, platoon unblocked	0.66	0.36			0.36	
vC, conflicting volume	3902	1462			2924	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	287	0			2788	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	71			100	
cM capacity (veh/h)	450	387			51	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	114	1869	1055	1038	1038	
Volume Left	0	0	0	0	0	
Volume Right	114	0	120	0	0	
cSH	387	1700	1700	1700	1700	
Volume to Capacity	0.29	1.10	0.62	0.61	0.61	
Queue Length 95th (ft)	30	0	0	0	0	
Control Delay (s)	18.1	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	18.1	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			88.0%	ICU Level of Service		E
Analysis Period (min)			15			











								
Lane Group	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	5	90	20	2335	330	15	5	1885
Future Volume (vph)	5	90	20	2335	330	15	5	1885
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	11	11	12	11	11
Grade (%)	0%			0%				0%
Storage Length (ft)	0	0	0		0		150	
Storage Lanes	1	1	0		0		1	
Taper Length (ft)	25		25				25	
Satd. Flow (prot)	1925	1723	0	3308	0	0	1745	3355
Flt Permitted	0.950						0.950	
Satd. Flow (perm)	1925	1723	0	3308	0	0	1745	3355
Link Speed (mph)	30			30				30
Link Distance (ft)	3579			475				405
Travel Time (s)	81.3			10.8				9.2
Confl. Peds. (#/hr)					2		2	
Confl. Bikes (#/hr)								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	4%	1%	0%	0%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%			0%				0%
Shared Lane Traffic (%)								
Lane Group Flow (vph)	5	98	0	2919	0	0	21	2049
Sign Control	Stop			Free				Free
Intersection Summary								
Area Type:	Other							
Control Type:	Unsignalized							
Intersection Capacity Utilization	101.6%				ICU Level of Service G			
Analysis Period (min)	15							
























								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	5	90	20	2335	330	15	5	1885
Future Volume (Veh/h)	5	90	20	2335	330	15	5	1885
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	98	0	2538	359	0	5	2049
Pedestrians	2							
Lane Width (ft)	14.0							
Walking Speed (ft/s)	4.0							
Percent Blockage	0							
Right turn flare (veh)								
Median type				None				None
Median storage (veh)								
Upstream signal (ft)								405
pX, platoon unblocked	0.38		0.00			0.00		
vC, conflicting volume	3754	1450	0			0	2899	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	4983	1450	0			0	2899	
tC, single (s)	6.8	6.9	0.0			0.0	4.1	
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0			0.0	2.2	
p0 queue free %	0	20	0			0	96	
cM capacity (veh/h)	0	122	0			0	128	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3	
Volume Total	5	98	1692	1205	5	1024	1024	
Volume Left	5	0	0	0	5	0	0	
Volume Right	0	98	0	359	0	0	0	
cSH	0	122	1700	1700	128	1700	1700	
Volume to Capacity	33.39	0.80	1.00	0.71	0.04	0.60	0.60	
Queue Length 95th (ft)	Err	118	0	0	3	0	0	
Control Delay (s)	Err	102.4	0.0	0.0	34.2	0.0	0.0	
Lane LOS	F	F			D			
Approach Delay (s)	582.8		0.0		0.1			
Approach LOS	F							
Intersection Summary								
Average Delay			11.9					
Intersection Capacity Utilization			101.6%		ICU Level of Service		G	
Analysis Period (min)			15					

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	105	2385	135	0	1930
Future Volume (vph)	0	105	2385	135	0	1930
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	11	11	11	11
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	1757	3299	0	0	3323
Flt Permitted						
Satd. Flow (perm)	0	1757	3299	0	0	3323
Link Speed (mph)	30		30			30
Link Distance (ft)	911		2394			546
Travel Time (s)	20.7		54.4			12.4
Confl. Peds. (#/hr)	1					
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	6%	5%	4%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	114	2739	0	0	2098
Sign Control	Stop		Free			Free
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 83.4%	ICU Level of Service E					
Analysis Period (min) 15						

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	105	2385	135	0	1930
Future Volume (Veh/h)	0	105	2385	135	0	1930
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	114	2592	147	0	2098
Pedestrians			1			
Lane Width (ft)			11.0			
Walking Speed (ft/s)			4.0			
Percent Blockage			0			
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3716	1370			2739	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3716	1370			2739	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.4			2.2	
p0 queue free %	100	13			100	
cM capacity (veh/h)	3	131			149	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	114	1728	1011	1049	1049	
Volume Left	0	0	0	0	0	
Volume Right	114	0	147	0	0	
cSH	131	1700	1700	1700	1700	
Volume to Capacity	0.87	1.02	0.59	0.62	0.62	
Queue Length 95th (ft)	139	0	0	0	0	
Control Delay (s)	110.3	0.0	0.0	0.0	0.0	
Lane LOS	F					
Approach Delay (s)	110.3	0.0		0.0		
Approach LOS	F					
Intersection Summary						
Average Delay			2.5			
Intersection Capacity Utilization			83.4%	ICU Level of Service	E	
Analysis Period (min)			15			

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	60	130	665	5	5	430
Future Volume (vph)	60	130	665	5	5	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1615	1445	3606	0	0	3351
Flt Permitted	0.950					0.999
Satd. Flow (perm)	1615	1445	3606	0	0	3351
Link Speed (mph)	30		30			30
Link Distance (ft)	817		1471			233
Travel Time (s)	18.6		33.4			5.3
Confl. Peds. (#/hr)	1	8				
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	1	1		1		1
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	65	141	728	0	0	472
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	35.1%			ICU Level of Service A		
Analysis Period (min)	15					

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	60	130	665	5	5	430
Future Volume (Veh/h)	60	130	665	5	5	430
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	65	141	723	5	5	467
Pedestrians			1			8
Lane Width (ft)			12.0			12.0
Walking Speed (ft/s)			4.0			4.0
Percent Blockage			0			1
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						233
pX, platoon unblocked						
vC, conflicting volume	970	372			728	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	970	372			728	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	74	78			99	
cM capacity (veh/h)	253	627			885	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	65	141	482	246	161	311
Volume Left	65	0	0	0	5	0
Volume Right	0	141	0	5	0	0
cSH	253	627	1700	1700	885	1700
Volume to Capacity	0.26	0.22	0.28	0.14	0.01	0.18
Queue Length 95th (ft)	25	21	0	0	0	0
Control Delay (s)	24.1	12.4	0.0	0.0	0.3	0.0
Lane LOS	C	B			A	
Approach Delay (s)	16.1		0.0		0.1	
Approach LOS	C					
Intersection Summary						
Average Delay			2.4			
Intersection Capacity Utilization			35.1%		ICU Level of Service	A
Analysis Period (min)			15			

							
Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	0	15	55	1230	200	25	2505
Future Volume (vph)	0	15	55	1230	200	25	2505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	11	11	11	11
Grade (%)	0%			0%			0%
Storage Length (ft)	0	0	0		0	150	
Storage Lanes	0	1	0		0	1	
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	0	1623	0	3147	0	1745	3323
Flt Permitted				0.998		0.950	
Satd. Flow (perm)	0	1623	0	3147	0	1745	3323
Link Speed (mph)	30			30			30
Link Distance (ft)	3577			475			405
Travel Time (s)	81.3			10.8			9.2
Confl. Peds. (#/hr)		2			2	2	
Confl. Bikes (#/hr)							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	8%	2%	8%	13%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%			0%
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	16	0	1614	0	27	2723
Sign Control	Stop			Free			Free












#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 92.0% ICU Level of Service F

Analysis Period (min) 15

							
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	0	15	55	1230	200	25	2505
Future Volume (Veh/h)	0	15	55	1230	200	25	2505
Sign Control	Stop			Free			Free
Grade	0%			0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	16	0	1337	217	27	2723
Pedestrians	2						2
Lane Width (ft)	14.0						11.0
Walking Speed (ft/s)	4.0						4.0
Percent Blockage	0						0
Right turn flare (veh)							
Median type				None			None
Median storage (veh)							
Upstream signal (ft)							405
pX, platoon unblocked	0.32		0.00				
vC, conflicting volume	2863	781	0			1556	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2567	781	0			1556	
tC, single (s)	6.8	7.1	0.0			4.1	
tC, 2 stage (s)							
tF (s)	3.5	3.4	0.0			2.2	
p0 queue free %	100	95	0			94	
cM capacity (veh/h)	6	324	0			430	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3	
Volume Total	16	891	663	27	1362	1362	
Volume Left	0	0	0	27	0	0	
Volume Right	16	0	217	0	0	0	
cSH	324	1700	1700	430	1700	1700	
Volume to Capacity	0.05	0.52	0.39	0.06	0.80	0.80	
Queue Length 95th (ft)	4	0	0	5	0	0	
Control Delay (s)	16.7	0.0	0.0	13.9	0.0	0.0	
Lane LOS	C			B			
Approach Delay (s)	16.7	0.0		0.1			
Approach LOS	C						
Intersection Summary							
Average Delay			0.1				
Intersection Capacity Utilization			92.0%		ICU Level of Service	F	
Analysis Period (min)			15				














Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø2	Ø7	Ø9
Lane Configurations		↑↑	↑		↓	↑↑↑		↓		↑			↑			
Traffic Volume (vph)	0	955	120	5	95	1305	5	60	0	45	0	0	10			
Future Volume (vph)	0	955	120	5	95	1305	5	60	0	45	0	0	10			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Lane Width (ft)	12	11	11	12	9	11	12	10	12	12	12	12	16			
Grade (%)		0%				0%			0%			0%				
Storage Length (ft)	0		0		100		0	0		100	0		0			
Storage Lanes	0		1		1		0	1		1	0		1			
Taper Length (ft)	25				25			25			25					
Satd. Flow (prot)	0	3388	1501	0	1594	4898	0	2944	0	1615	0	0	1826			
Flt Permitted					0.950			0.950								
Satd. Flow (perm)	0	3388	1501	0	1594	4898	0	2944	0	1615	0	0	1826			
Right Turn on Red			No				Yes			No			No			
Satd. Flow (RTOR)						1										
Link Speed (mph)		30				30			30			30				
Link Distance (ft)		236				635			1415			589				
Travel Time (s)		5.4				14.4			32.2			13.4				
Confl. Peds. (#/hr)																
Confl. Bikes (#/hr)							1									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Heavy Vehicles (%)	0%	3%	4%	0%	2%	2%	0%	11%	0%	0%	2%	2%	2%			
Bus Blockages (#/hr)	0	0	0	0	0	0	2	0	0	0	0	0	0			
Parking (#/hr)																
Mid-Block Traffic (%)		0%				0%			0%			0%				
Shared Lane Traffic (%)																
Lane Group Flow (vph)	0	1038	130	0	108	1423	0	65	0	49	0	0	11			
Turn Type		NA	Prot	Prot	Prot	NA		Prot		Prot			Perm			
Protected Phases		2 7	2 7	5	5	2 5 7		3		3				2	7	9
Permitted Phases													3			
Detector Phase		2 7	2 7	5	5	2 5 7		3		3			3			
Switch Phase																
Minimum Initial (s)				1.0	1.0			8.0		8.0			8.0	20.0	4.0	4.0
Minimum Split (s)				20.0	20.0			13.0		13.0			13.0	26.0	8.0	22.0
Total Split (s)				20.0	20.0			13.0		13.0			13.0	26.0	9.0	22.0
Total Split (%)				22.2%	22.2%			14.4%		14.4%			14.4%	29%	10%	24%
Yellow Time (s)				3.0	3.0			4.0		4.0			4.0	4.0	3.5	3.5
All-Red Time (s)				1.0	1.0			1.0		1.0			1.0	2.0	0.5	0.5
Lost Time Adjust (s)					-1.0			-1.0		-1.0			-1.0			
Total Lost Time (s)					3.0			4.0		4.0			4.0			
Lead/Lag				Lag	Lag			Lead		Lead			Lead	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes									Yes	Yes	
Recall Mode				None	None			None		None			None	Min	None	None
Act Effct Green (s)		31.4	29.4		17.2	51.0		9.1		9.1			9.1			
Actuated g/C Ratio		0.43	0.41		0.24	0.70		0.13		0.13			0.13			
v/c Ratio		0.71	0.21		0.28	0.41		0.18		0.24			0.05			
Control Delay		17.2	13.4		27.2	4.6		32.0		34.6			32.2			
Queue Delay		2.4	0.5		0.0	0.1		0.0		0.0			0.0			
Total Delay		19.6	13.9		27.2	4.7		32.0		34.6			32.2			
LOS		B	B		C	A		C		C			C			
Approach Delay		19.0				6.3		33.1				32.2				
Approach LOS		B				A		C				C				
Queue Length 50th (ft)		126	28		36	56		12		19			4			
Queue Length 95th (ft)		m#395	m51		103	124		37		62			22			
Internal Link Dist (ft)		156				555		1335				509				
Turn Bay Length (ft)					100					100						
Base Capacity (vph)		1468	609		379	3450		370		203			229			
Starvation Cap Reductn		294	229		0	0		0		0			0			
Spillback Cap Reductn		0	0		0	695		0		0			0			
Storage Cap Reductn		0	0		0	0		0		0			0			
Reduced v/c Ratio		0.88	0.34		0.28	0.52		0.18		0.24			0.05			













Intersection Summary	
Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	72.4
Natural Cycle:	90
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	1.00
Intersection Signal Delay:	12.7
Intersection LOS:	B
Intersection Capacity Utilization	48.6%
ICU Level of Service	A
Analysis Period (min)	15
#	95th percentile volume exceeds capacity, queue may be longer.
	Queue shown is maximum after two cycles.
m	Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 39: Tomasello Dr/Shaws Driveway & Winthrop Ave/Route 145

#38 #39	#38 #39	#38 #39	#38 #39	#38 #39
Ø7	Ø2	Ø3	Ø5	Ø9
9 s	26 s	13 s	20 s	22 s



													
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗		↖	↑↑↗		↖↖		↗			↗
Traffic Volume (vph)	0	955	120	5	95	1305	5	60	0	45	0	0	10
Future Volume (vph)	0	955	120	5	95	1305	5	60	0	45	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	12	9	11	12	10	12	12	12	12	16
Total Lost time (s)		4.0	6.0		3.0	4.0		4.0		4.0			4.0
Lane Util. Factor		0.95	1.00		1.00	0.91		0.97		1.00			1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00			1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00			1.00
Frt		1.00	0.85		1.00	1.00		1.00		0.85			0.86
Flt Protected		1.00	1.00		0.95	1.00		0.95		1.00			1.00
Satd. Flow (prot)		3388	1501		1594	4900		2944		1615			1826
Flt Permitted		1.00	1.00		0.95	1.00		0.95		1.00			1.00
Satd. Flow (perm)		3388	1501		1594	4900		2944		1615			1826
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1038	130	5	103	1418	5	65	0	49	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1038	130	0	108	1423	0	65	0	49	0	0	11
Confl. Bikes (#/hr)							1						
Heavy Vehicles (%)	0%	3%	4%	0%	2%	2%	0%	11%	0%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0	0
Turn Type		NA	Prot	Prot	Prot	NA		Prot		Prot			Perm
Protected Phases		2 7	2 7	5	5	2 5 7		3		3			
Permitted Phases													3
Actuated Green, G (s)		29.4	29.4		16.2	45.6		8.1		8.1			8.1
Effective Green, g (s)		29.4	25.4		17.2	47.6		9.1		9.1			9.1
Actuated g/C Ratio		0.39	0.34		0.23	0.63		0.12		0.12			0.12
Clearance Time (s)					4.0			5.0		5.0			5.0
Vehicle Extension (s)					3.0			4.0		4.0			4.0
Lane Grp Cap (vph)		1317	504		362	3085		354		194			219
v/s Ratio Prot		c0.31	0.09		0.07	c0.29		0.02		c0.03			
v/s Ratio Perm													0.01
v/c Ratio		0.79	0.26		0.30	0.46		0.18		0.25			0.05
Uniform Delay, d1		20.4	18.2		24.2	7.3		29.9		30.2			29.4
Progression Factor		0.74	0.77		1.00	1.00		1.00		1.00			1.00
Incremental Delay, d2		3.2	0.4		0.5	0.1		0.3		0.9			0.1
Delay (s)		18.3	14.4		24.7	7.5		30.3		31.1			29.6
Level of Service		B	B		C	A		C		C			C
Approach Delay (s)		17.9				8.7		30.6				29.6	
Approach LOS		B				A		C				C	
Intersection Summary													
HCM 2000 Control Delay			13.5		HCM 2000 Level of Service					B			
HCM 2000 Volume to Capacity ratio			0.63										
Actuated Cycle Length (s)			75.6		Sum of lost time (s)						22.0		
Intersection Capacity Utilization			48.6%		ICU Level of Service						A		
Analysis Period (min)			15										
c Critical Lane Group													

								
Lane Group	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	0	90	20	2335	330	15	5	1890
Future Volume (vph)	0	90	20	2335	330	15	5	1890
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	12	11	11	12	11	11
Grade (%)	0%			0%				0%
Storage Length (ft)	0	0	0		0		150	
Storage Lanes	0	1	0		0		1	
Taper Length (ft)	25		25				25	
Satd. Flow (prot)	0	1753	0	3308	0	0	1745	3355
Flt Permitted							0.950	
Satd. Flow (perm)	0	1753	0	3308	0	0	1745	3355
Link Speed (mph)	30			30				30
Link Distance (ft)	3579			475				405
Travel Time (s)	81.3			10.8				9.2
Confl. Peds. (#/hr)					2		2	
Confl. Bikes (#/hr)								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	4%	1%	0%	0%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%			0%				0%
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	98	0	2919	0	0	21	2054
Sign Control	Stop			Free				Free













#### Intersection Summary

Area Type: Other














Control Type: Unsignalized

Intersection Capacity Utilization 101.6% ICU Level of Service G

Analysis Period (min) 15

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	0	90	20	2335	330	15	5	1890
Future Volume (Veh/h)	0	90	20	2335	330	15	5	1890
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	98	0	2538	359	0	5	2054
Pedestrians	2							
Lane Width (ft)	14.0							
Walking Speed (ft/s)	4.0							
Percent Blockage	0							
Right turn flare (veh)								
Median type			None				None	
Median storage (veh)								
Upstream signal (ft)							405	
pX, platoon unblocked	0.38		0.00			0.00		
vC, conflicting volume	3756	1450	0			0	2899	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	4991	1450	0			0	2899	
tC, single (s)	6.8	6.9	0.0			0.0	4.1	
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0			0.0	2.2	
p0 queue free %	100	20	0			0	96	
cM capacity (veh/h)	0	122	0			0	128	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	98	1692	1205	5	1027	1027		
Volume Left	0	0	0	5	0	0		
Volume Right	98	0	359	0	0	0		
cSH	122	1700	1700	128	1700	1700		
Volume to Capacity	0.80	1.00	0.71	0.04	0.60	0.60		
Queue Length 95th (ft)	118	0	0	3	0	0		
Control Delay (s)	102.4	0.0	0.0	34.2	0.0	0.0		
Lane LOS	F			D				
Approach Delay (s)	102.4	0.0		0.1				
Approach LOS	F							
Intersection Summary								
Average Delay			2.0					
Intersection Capacity Utilization			101.6%		ICU Level of Service		G	
Analysis Period (min)			15					

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø2	Ø7	Ø9
Lane Configurations		↔↔	↗		↖	↔↔↔		↗↗		↗			↗			
Traffic Volume (vph)	0	1250	225	5	155	945	5	360	0	485	0	0	5			
Future Volume (vph)	0	1250	225	5	155	945	5	360	0	485	0	0	5			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Lane Width (ft)	12	11	11	12	9	11	12	10	12	12	12	12	16			
Grade (%)		0%				0%			0%			0%				
Storage Length (ft)	0		0		100		0	0		100	0		0			
Storage Lanes	0		1		1		0	1		1	0		1			
Taper Length (ft)	25				25			25			25					
Satd. Flow (prot)	0	3455	1546	0	1624	4947	0	3236	0	1599	0	0	1826			
Flt Permitted					0.950			0.950								
Satd. Flow (perm)	0	3455	1546	0	1624	4947	0	3236	0	1599	0	0	1826			
Right Turn on Red			No				Yes			No			No			
Satd. Flow (RTOR)						1										
Link Speed (mph)		30				30			30			30				
Link Distance (ft)		236				635			1415			589				
Travel Time (s)		5.4				14.4			32.2			13.4				
Confl. Peds. (#/hr)	3															
Confl. Bikes (#/hr)																
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Heavy Vehicles (%)	0%	1%	1%	0%	0%	1%	0%	1%	0%	1%	2%	2%	2%			
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0	0			
Parking (#/hr)																
Mid-Block Traffic (%)		0%				0%			0%			0%				
Shared Lane Traffic (%)																
Lane Group Flow (vph)	0	1359	245	0	173	1032	0	391	0	527	0	0	5			
Turn Type		NA	Prot	Prot	Prot	NA		Prot		Prot			Perm			
Protected Phases		2 7	2 7	5	5	2 5 7		3		3				2	7	9
Permitted Phases													3			
Detector Phase		2 7	2 7	5	5	2 5 7		3		3			3			
Switch Phase																
Minimum Initial (s)				1.0	1.0			8.0		8.0			8.0	20.0	20.0	4.0
Minimum Split (s)				20.0	20.0			13.0		13.0			13.0	26.0	26.0	22.0
Total Split (s)				20.0	20.0			25.0		25.0			25.0	27.0	26.0	22.0
Total Split (%)				16.7%	16.7%			20.8%		20.8%			20.8%	23%	22%	18%
Yellow Time (s)				3.0	3.0			4.0		4.0			4.0	4.0	4.0	3.5
All-Red Time (s)				1.0	1.0			1.0		1.0			1.0	2.0	2.0	0.5
Lost Time Adjust (s)					-1.0			-1.0		-1.0			-1.0			
Total Lost Time (s)					3.0			4.0		4.0			4.0			
Lead/Lag				Lag	Lag			Lead		Lead			Lead	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes											
Recall Mode				None	None			None		None			None	Min	Min	None
Act Effct Green (s)		49.5	47.5		17.2	68.3		21.2		21.2			21.2			
Actuated g/C Ratio		0.46	0.44		0.16	0.64		0.20		0.20			0.20			
v/c Ratio		0.85	0.36		0.66	0.33		0.61		1.66			0.01			
Control Delay		33.2	26.4		57.7	7.0		45.3		341.8			39.8			
Queue Delay		48.1	4.2		0.0	0.2		0.0		0.0			0.0			
Total Delay		81.2	30.7		57.7	7.1		45.3		341.8			39.8			
LOS		F	C		E	A		D		F			D			
Approach Delay		73.5				14.4		215.5				39.8				
Approach LOS		E				B		F				D				
Queue Length 50th (ft)		263	83		101	76		112		~465			3			
Queue Length 95th (ft)		#659	180		#239	91		202		#840			15			
Internal Link Dist (ft)		156				555			1335			509				
Turn Bay Length (ft)					100					100						
Base Capacity (vph)		1600	687		261	3162		642		317			362			
Starvation Cap Reductn		509	359		0	0		0		0			0			
Spillback Cap Reductn		0	0		0	1066		0		0			0			
Storage Cap Reductn		0	0		0	0		0		0			0			
Reduced v/c Ratio		1.25	0.75		0.66	0.49		0.61		1.66			0.01			
Intersection Summary																
Area Type: Other																
Cycle Length: 120																
Actuated Cycle Length: 106.8																
Natural Cycle: 150																
Control Type: Semi Act-Uncoord																
Maximum v/c Ratio: 1.66																
Intersection Signal Delay: 89.3 Intersection LOS: F																
Intersection Capacity Utilization 83.4% ICU Level of Service E																
Analysis Period (min) 15																
- Volume exceeds capacity, queue is theoretically infinite.																
Queue shown is maximum after two cycles.																
# 95th percentile volume exceeds capacity, queue may be longer.																
Queue shown is maximum after two cycles.																
Splits and Phases: 39: Tomasello Dr/Shaws Driveway & Winthrop Ave/Route 145																
26 s		27 s		25 s		20 s		22 s								

													
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↓	↑↑↓	↓	↑↑		↑			↑
Traffic Volume (vph)	0	1250	225	5	155	945	5	360	0	485	0	0	5
Future Volume (vph)	0	1250	225	5	155	945	5	360	0	485	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	12	9	11	12	10	12	12	12	12	16
Total Lost time (s)		4.0	6.0		3.0	4.0		4.0		4.0			4.0
Lane Util. Factor		0.95	1.00		1.00	0.91		0.97		1.00			1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00			1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00		1.00			1.00
Frt		1.00	0.85		1.00	1.00		1.00		0.85			0.86
Flt Protected		1.00	1.00		0.95	1.00		0.95		1.00			1.00
Satd. Flow (prot)		3455	1546		1624	4948		3236		1599			1826
Flt Permitted		1.00	1.00		0.95	1.00		0.95		1.00			1.00
Satd. Flow (perm)		3455	1546		1624	4948		3236		1599			1826
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1359	245	5	168	1027	5	391	0	527	0	0	5
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1359	245	0	173	1032	0	391	0	527	0	0	5
Confl. Peds. (#/hr)	3												
Heavy Vehicles (%)	0%	1%	1%	0%	0%	1%	0%	1%	0%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0	0
Turn Type	NA	Prot	Prot	Prot	NA	Prot	Prot	Prot	Prot	Prot			Perm
Protected Phases	2 7	2 7	5	5	2 5 7	3	3	3	3	3			
Permitted Phases													3
Actuated Green, G (s)		47.4	47.4		16.2	63.6		20.2		20.2			20.2
Effective Green, g (s)		49.4	47.4		17.2	67.6		21.2		21.2			21.2
Actuated g/C Ratio		0.45	0.43		0.16	0.62		0.19		0.19			0.19
Clearance Time (s)					4.0			5.0		5.0			5.0
Vehicle Extension (s)					3.0			4.0		4.0			4.0
Lane Grp Cap (vph)		1562	671		255	3063		628		310			354
v/s Ratio Prot		c0.39	0.16		c0.11	0.21		0.12		c0.33			
v/s Ratio Perm													0.00
v/c Ratio		0.87	0.37		0.68	0.34		0.62		1.70			0.01
Uniform Delay, d1		27.0	20.8		43.4	10.0		40.3		44.0			35.6
Progression Factor		1.01	1.14		1.00	1.00		1.00		1.00			1.00
Incremental Delay, d2		5.2	0.4		7.0	0.1		2.2		328.5			0.0
Delay (s)		32.6	24.0		50.4	10.1		42.5		372.5			35.6
Level of Service		C	C		D	B		D		F			D
Approach Delay (s)		31.3				15.9			232.0			35.6	
Approach LOS		C				B			F			D	
<b>Intersection Summary</b>													
HCM 2000 Control Delay		75.7			HCM 2000 Level of Service			E					
HCM 2000 Volume to Capacity ratio		1.06											
Actuated Cycle Length (s)		109.2			Sum of lost time (s)			24.0					
Intersection Capacity Utilization		83.4%			ICU Level of Service			E					
Analysis Period (min)		15											

c Critical Lane Group